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1971

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EDUCATIONAL TESTING SERVICE

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The Twentieth Annual
Western Regional Conference on
Testing Problems

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The Assessment of Non-Standard Programs— the Need and the Promise

May 7, 1971 • Hilton Inn
Oakland International Airport

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Robert G. Cameron, *Chairman*

EDUCATIONAL TESTING SERVICE
Princeton, New Jersey • Berkeley, California

Preface

The Conference Theme: The Assessment of Non-Standard Programs —The Need and the Promise deals essentially with two issues—assessment/accountability and non-traditional programs. The non-traditional concept is education's response to demands to do things differently and to find new ways of accomplishing what may be old things. The papers indicate that the innovative comes more easily than the evaluative. Suggested departures come from students, legislatures, administrators and more grudgingly from the faculty. The character of some of these departures seems to be, "anything is possible as long as someone else will do the work." Glenn Dumke and John Valentine describe two major departures from the traditional.

Richard Peterson describes the complex process of setting goals, gaining acceptance of and assessing progress toward them. Alexander Law brings us assurance that evaluation mandated by government authorities can be treated with sensitivity and humaneness.

William Schabacker concluded the conference on a hopeful and positive note in proposing a workable and working solution to demands for state-wide assessment.

Taken as a whole, the papers illustrate the promise which innovation holds and the complexities of assessing the outcomes of both the innovative and the traditional.

Robert G. Cameron
CHAIRMAN

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The Twentieth Annual Western Regional Conference on Testing Problems

The twentieth annual meeting of the Western Regional Conference on Testing Problems was convened at 9:15 am, Friday, May 7, 1971 in the Hilton Inn at the Oakland International Airport. Robert G. Cameron, Director of the Western Regional Office of the College Entrance Examination Board, presided as chairman.

The "New Approach of the California State Colleges"

GLENN S. DUMKE

Most of us in higher education today, and there are many of us, who are considering new approaches to the educational process, are influenced, whether we realize it or not, by our own student experience. I certainly am well aware of the fact that my own undergraduate years at Occidental have strongly influenced my concerns about higher education, and my experience also as a young faculty member there left me with ideas that I have thought about for many years. The student experience produced in me a conviction that comprehensive examinations for the major were a very good idea. For the first time in my life I was faced with an educational program which could not be approached in bits and pieces, which had to be integrated by me into a coherent whole, and remembered, so that I could face the evaluation that loomed ahead. My discipline, history, was one which encouraged this type of intellectual integration, but it became evident to me that such stimulation of insights could be applied to almost any field. As a

result of having to prepare for a comprehensive examination, the jump to graduate work was not a serious problem, and I feel certain that many others have had the same experience.

Then, when I was a young faculty member at Occidental, President Arthur Coons determined to apply the general education concepts, which were then being developed out of Harvard, to our lower division curriculum, and in the face of much opposition by a tradition-oriented faculty, including myself, he put into effect a "History of Civilization" course for five units of credit per semester, lasting two years and incorporating all of the social sciences and humanities plus psychology and certain other related subjects. An attempt was made to involve a layman's approach to science primarily by way of a "history of thought" approach, but this was finally deemed unsatisfactory, and a concurrent course in science for the non-major was developed. This was my first team teaching experience, and, just as when a student, I became impressed with the virtues of having one part of a discipline rub off against another, I now became equally impressed with the advantages of having a representative of one discipline bounce his concepts off others in that and related fields.

The responses of students to this Occidental experiment were very interesting. While they were taking the course they went through the usual student process of strenuous objection to the work-load and to the number of hours they were forced to spend in class and quiz section, but after they became alumni—and I stayed at the college long enough so I was able to get these post-graduation reflections in some numbers—they were almost uniformly complimentary. Statements such as, "This was the finest educational experience I ever had" and "Even though I rebelled against the work-load, I found this was the phase of my college years that has stayed with me longest and has opened many intellectual doors"—this kind of comment was very gratifying and seemed to indicate that the approach was doing its job.

As the aura surrounding the general education concept died, the old faculty pressures began to exert themselves, and gradually more and more electives were put into the program, the team-teaching approach was diluted, and the argument that it was impossible to decide what "every educated person should know" became dominant. When I entered the State Colleges, I found that the general education approach had never taken deep root, and although I made some attempts to apply it when I was president of San Francisco State, it met with

such opposition that I was never able to get very far in this direction.

The balkanization of the undergraduate curriculum has increased since those years, and today there are very few programs which accept the principle that a faculty member knows better than a student what the student should know. I think this is a mistake, and one aspect of the proposals I have made to the California State Colleges is designed to start a move in the other direction.

As a result of this background and of many years of brooding about the problem, last January I came before the Educational Policy Committee of our Board, with a statement, parts of which I want to quote to you now. I started by saying,

> I believe that the time for fundamental changes in the character of, and in our approach to, higher education has come. Students and faculties and public alike have been questioning the educational results of our current systems, and many of us have serious doubts about their continuing efficacy. In addition, the increasing numbers of persons who want to be educated, and the increasing pressures upon the tax dollar, both in California and throughout the nation, make it very clear that under existing systems we will either have to limit our service, or thin out our operational quality, neither of them very acceptable as alternatives. The necessary changes will not be brought about by the inflexible, tradition-ridden, Ivy-League-type universities, but rather by institutions like ours, young enough to be flexible, historically teaching-oriented, and not afraid to try something new. We have the opportunity to be the bellwether for the nation in changes, certain of which are inevitable. In proposing these changes, I am guided by the triple goals of expanding educational opportunity for the thousands of students who are knocking at our doors; the maintenance and improvement of academic quality which we have struggled for over the last ten years, and have achieved in large measure; and greater value received by both students and taxpayers—goals which we clearly cannot hope to achieve under our current fiscal constraints and our present rigid systems.

In line with this background statement, I made three basic suggestions. The first one read as follows: "I propose that we challenge the lockstep, time-serving practice of offering a degree based on the accumulation of credits, hours, semesters, and classes attended. I

propose that we offer, instead, degrees based on academic achievement, carefully measured and evaluated by competent faculties." I stated that I felt the period of time spent in college could be reduced by one-half to one full year or more for many, if not for most students, by a deliberately strengthened and advanced placement working relationship with the high schools and through comprehensive examinations given lower-division students. Through such programs credit could be given for much of our general education.

What I was basically proposing was the division of the undergraduate curriculum into large blocks of work which would then be evaluated and tested by varying types of examinations worked out by the faculties, involving not only existing standardized tests, but also oral examinations, creative work projects, etc.

What needed to be done of course, at the outset, was to determine what the undergraduate degree consisted of, and I repeated my own concept of a state college degree. Our bachelor's degree should represent a dual approach, both learning in breadth, which includes the development of the perspectives, the problem-solving skills, the communications competence, and the appreciations of the liberal arts, and in depth, which stresses high competence in a specific major area. Such a combination of breadth and depth, as fairly well shown by existing research, enables a person to live a better life and to adapt intelligently to changing conditions, as well as to make a living in today's world. This approach stresses human development as well as occupational competence. Higher education almost uniformly has defined requirements for the degree in quantitative terms, about 124 to 132 semester units comprising some 2000 fifty-minute periods in a variety of courses. The student's knowledge, abilities, appreciation, comprehension, and over-all achievements are recognized for degree-granting purposes only in bits and pieces. Credits, units, grades, etc., signify the completion of the required work of given courses, each of which is taken separately, and in many cases dismissed from the mind when completed.

My feeling is that the general education breadth requirements of the liberal arts, which comprise a large portion of the lower division curriculum, should be redefined in terms of basic bodies of knowledge, appreciations, and skills instead of the present definition solely in terms of units and courses. The requirements thus redefined might be subdivided into suitable large component parts, each of which would

be open to a challenge or comprehensive examination. One possibility would be to have general education divided into four areas, social science, humanities, science or mathematics, and communications skills, each with a suitable challenge examination available. If a student can demonstrate that he can write well, there is no need for him to sit through a course of elementary composition. If a student learned basic American history in high school, there should be no requirement which says he must repeat that experience as a freshman. I pointed out that there currently exist recognized examinations used nationally in the areas of general education breadth requirements, and since the State Colleges accept transfer units sight-unseen, we should be willing to accept national test scores, particularly if we give the examinations.

With regard to the upper division, comprehensive examinations should also be established in all major fields of knowledge which the colleges offer. The objectives should be that a student need not complete a certain number of units to meet the degree requirements, but could instead secure a degree based on a tested achievement level at any time he feels competent with the help of faculty advisement to subject himself to such an examination. Corollary to this idea was that classroom attendance would not be an absolute prerequisite to the degree. If the student feels that he can get the information required to prepare for his examination by attending class, well and good. Classes will be offered. If he is convinced, on the other hand, that he can do better by studying in the library or by reading at home or by taking an educational TV course or some programmed learning device, then these opportunities should be opened to him. It is my feeling that we have enough able students so that the pressure on our classrooms, which has been intense over the last several years and apparently will continue for the next decade, might be reduced somewhat by this enlargement of varied opportunities for achievement of the degree.

The immediate question arises: does this favor the able student? Obviously it gives the able student encouragement to proceed at his own pace, which I think is something that is badly needed by our current educational system. We are losing many students through drop-out who are so able that the time-serving approach of the undergraduate curriculum bores them, and certainly this approach would help solve that problem. On the other hand, there are many students who need the class work, but hopefully they would be attending classes

less well filled, and certainly with some elbow room caused by many able students deciding to use other methods of acquiring knowledge.

Obviously these proposals have cost implications which make them currently more acceptable than they would have been at other times, but the basic reason for the proposal was my own educational philosophy. The idea is that a cafeteria approach to undergraduate education is educationally and psychologically less satisfactory than an approach which forces a student to relate the various parts of his educational experience into a coherent whole in his own mind. Moreover, I strongly feel that if one is convinced that, after a certain date, one can forget a subject without penalty, he has less tendency to remember it than if he is convinced that he is going to be faced with some evaluation of this knowledge in the future.

This was the first phase of my proposals. The second phase had to do with the concept of the external degree. I pointed out that certain aspects of the British "open university" idea might well be applied to the California State Colleges, although I stipulated that I did not feel that the British approach or the SUNY approach, both of which involve the setting up of a separate institution for the granting of external degrees, was either suitable or financeable under current conditions in the California State Colleges. I suggested that we provide degree opportunities for substantial numbers of students other than through an on-campus program of students in residence and that we start giving degrees through extension. Although the State Colleges have a limited extension program, they have never been able to devote much attention to the increasingly important field of continuing and adult education, because their staff and facilities have been so overtaxed with pressures at the undergraduate level. The freeing of the undergraduate from required classroom attendance, as I proposed, would enable some existing facilities to be used for continuing education, and the upgrading of extension classes to equivalency with regular academic offerings, together with the ability to mix in a single class students on state-support and students on self-support, would also open the door to many who could not otherwise be accommodated. Moreover, the application of modern technology to higher education, such as televised instruction, correspondence courses, self-study combined with intensive short course on-campus programs, taped lectures with study guides, and programmed-learning, as well as classroom instruction on or off campus could be utilized to extend college oppor-

tunities to many more students on a self-support basis, with a consequent reduced demand upon on-campus educational facilities and resources.

Both of these major proposals involve certain technical and legal changes that are basic to their success. One certainly was the necessity to get away from present devices for measuring staff and budget and to move to a support budget based on a student-faculty ratio with different levels of support for lower-division, upper-division, and graduate students. In addition, there must be more flexibility in the use of faculty time to permit a major shift in the nature of faculty responsibility so as to provide greater attention to advising, counseling, and evaluating students. As far as the State Colleges are concerned this means a change in the measurement of faculty workload. Currently our faculty are measured, and quite rigidly, on their teaching twelve hours a week in the classroom. This, together with the required preparation time, constitutes certainly a full-time load, and in some cases more than a full-time load. But if classroom attendance were no longer to be required of all students for graduation, then certainly it could no longer be required of all faculty for workload measurement.

In addition, I felt it was necessary to make certain that our extension offerings, if they were to be considered interchangeably with our regular programs, and if all classes, both regular and extension, were to be attended by a mix of regular and extension students, be upgraded so that they were absolutely consonant in quality with the regular program. I am certain that most of our extension program fills this requirement now, but certainly parts of it do not.

In addition, I think it will be necessary to establish ways and means of breaking down barriers between and among the colleges if these programs are to work. A student should be able to take academic work simultaneously at two or more State Colleges if they find it more convenient or saving in time or more appropriate to their specific educational objectives. Arbitrary barriers such as double fees, bureaucratic approval systems, and low registration priorities must be eliminated. We must become far more flexible in our efforts to fit our educational programs to the particular needs of serious students.

All of these proposals, of course, are confronted with the hard fact that in today's higher educational environment the accountability of faculty must be rigorously maintained. If classroom teaching is no longer to be the basis of workload measurement, then certainly we

must develop other auditable means of accounting for faculty productivity.

I suggested that the way to begin these programs would be through pilot approaches, hopefully starting in the fall of 1971. Much progress is being made in this direction with the establishment of two task forces and a commission on extension education.

The third major proposal I made was based on an in-depth reevaluation of three areas of our operational practices and programs. The first aspect of this had to do with the fact that many of our students take more than the number of units required to graduate. There are, of course, a good many reasons for this, many of them quite valid. But considering cost factors and other aspects of our current problems, I proposed the establishment of an absolute ceiling on the requirements for the degree and for majors, and I recommended that we develop a fair and equitable system whereby students not pursuing and making satisfactory progress toward a degree or credential objective be charged the full cost of instruction, and that those who on their own volition take work considerably in excess of that required for the degree or credential also be charged full costs.

Secondly, I urged that in spite of the State College record of being the most efficient higher educational institution in California in terms of facility use, and the fact that California is ahead of the nation in this respect, making the State Colleges about as efficient as any institution in the nation, we make additional effort to increase the utilization of our existing facilities. This would involve intensified use of late afternoon and evening classes and laboratories, and the immediate increase of Saturday use. Finally, our data have indicated that certain programs in our colleges have widely varied costs, and we have not been able to figure out why this phenomenon occurs so often. The same program in one college will cost far more than in another without obvious explanation. I proposed a careful study of the data to determine whether costs of some programs could be reduced without loss of quality, and whether it was unsound to continue some of them at certain colleges.

These proposed changes certainly cannot be brought about effectively without the support of the colleges and their faculties, and I am very pleased at the response I have received from all of our nineteen presidents and from many representatives of our faculties and student bodies. Many of them cannot be realized without the cooperation of

state agencies in modifying the budgeting process in providing greater flexibility, and conferences with the Governor and the Director of Finance have given me high hopes that we can develop some experimental flexible approaches to measurement of faculty workload, for instance, so that pilot programs can be started immediately. As a faculty member myself, who spent more than a decade in the classroom, I look upon these proposals as vastly rewarding to all faculty members who are fundamentally concerned with the end product—the educated graduate—rather than with the systems, the bureaucracy, and the time-worn practices which served well in another day but which now are anachronistic. These proposals when realized, hopefully, will enable us to avoid turning away so many students and at the same time an emphasis on self-support and extension will enable the taxpayer to feel that we do have consideration for him. Finally, and very importantly, this will enable the competent and industrious student, who is bored and frustrated with our complicated lockstep to the point where he often becomes a dropout, to march at his own pace, with the challenge of achievement and no wasted time constantly before him.

I concluded my proposals with the following statements: None of these proposals, I said, precludes continuing attention to disadvantaged or ethnic minorities; in fact, such attention would be facilitated with the additional flexibility. In addition, the fact that we are awarding a degree based on accumulative and carefully thought-out bodies of knowledge and skills which a student must master, not in bits and pieces as at present, but as a demanding whole, makes the student a far more active participant in the learning process. Instead of sitting in large groups to be lectured at with a fixed term of years, much like a prison sentence, before him, he will proceed at his own pace, and when he has mastered his subjects can be examined on them and be evaluated and can then move on. The only limitation will be that he will not be allowed to move so slowly that he becomes a burden to the state. This to me is genuine education. It puts a premium on individual initiative in the learning process, it frees our crowded classrooms and laboratories from those who do not need them or who because of high ability can move on quickly to other tasks, and it opens the door to thousands who want to learn and who can pay for the privilege but for whom there has been no room in our crowded schedules. Such changes, complex and difficult as they are, are neces-

sary. Our current systems, effective as they have been in the past, are at this moment on the edge of failure. The number of current proposals, which certainly have influenced my thinking in making these, are clear evidence of this fact. The impersonality of the large institution, the sharp horns of our immediate dilemma between quality and numbers, the unwillingness of our clients, the students, to accept much longer the rigidities of our present systems, all combined, force change upon us. We should make these changes as they should be made, voluntarily and with careful planning, rather than waiting to have them forced piecemeal upon us.

I well recognize that many of these ideas are not original with me, but the package which I have presented to the State Colleges is a series of proposals adapted to our particular and specific needs. As I say, the response I am receiving is excellent, and we have every hope of having certain pilot programs going in the fall and the groundwork laid for rapid expansion of these new approaches. Once they are tested we will decide whether or not to apply them wholesale. I personally am very optimistic for their success, and I know that as an educator my conscience will be much clearer in terms of our educational end product. In any case, what we are doing is giving some of these ideas a good try, and what we discover may well be helpful to many of you.

Toward Institutional Goal-Consciousness

RICHARD E. PETERSON

I. College Goals in Perspective

The concept of an "institutional goal" is just that—a concept, a verbal abstraction. But as a conceptual tool, the notion of goals can be enormously useful in deliberating, determining, and evaluating policy and practice in educational organizations. What should a given college or university attempt to accomplish? Educate the able, or educate the masses? Teach the wisdom of the ages, or prepare youths for the job market? Conduct research on any topic for which funds are available? Render services to any agency in the corporate or government establishments? Sponsor partisan political action? Sponsor ROTC training? These are matters of institutional policy, philosophy or ideology. Or, more from the standpoint of contemporary campus political realities, *whose* goals should the institution embrace—those of older, tradition-oriented professors, of research and discipline-obsessed faculty, of radical students, of conservative trustees? On many campuses, these and many more formal and informal interest groups hold widely divergent and often conflicting views of the role of the institution. What are the implications of such divisions for the well-being of the college? Can a modicum of internal consensus about institutional mission ever be expected, let us say, at the multiversity?

Fortunately, all institutions need not respond to the changing times in the same way. American higher education is not some kind of monolith. Yet diverse colleges—and I suppose I am speaking mainly about private colleges—must be able to articulate their unique goals in ways that are meaningful to their constituencies, supporters and potential supporters, if they are to expect the wherewithal necessary for their survival.

Jacques Barzun has likened the American university to a "firehouse on the corner" that responds to any and all requests for assistance, and for many years, with faithful public support, this was a role the university seemed to accept. Institutions simply added new functions to

existing ones. This academic bull-market, however, seems to have run its course. Financial resources have reached limits of availability. Educational costs have risen to new heights, and various external agencies press the institutions to evaluate their effectiveness and render account for expenditure of public and private funds. Yet it seems that demands continue to be made on the institutions to assume new functions and create new programs. And therein lie the elements of the "collision course" in higher education that David Riesman and others have warned of—the crunch of new demands against limited resources.

Let us consider briefly what some of the goals of American colleges and universities have been presumed to be, in the past and the present.

Going way back, the 18th century colleges came into being chiefly to educate miniscule elites for positions of leadership in the existing establishment. Throughout the 19th century a host of "special interest" colleges were created to serve the interests and values of various religious, occupational and social class groups; many of these eventually evolved into self-styled "liberal arts" colleges. The great watershed came in 1862 with the Morrill Act; the land grant colleges meant publicly supported secular, practical, vocational education for "the industrial classes," and they meant public service. Then, toward the end of the century, there was the importation of the German idea of the university as a center for specialized scientific research and scholarship. Perhaps the final major thread is the dramatic rise since the end of World War II of the two-year community college, with its open doors and community service orientation.

Thus the conventional wisdom is to ascribe three broad purposes to the modern American university: teaching, research, and public service. Ph.D. granting universities, however, account for only 300 or so of the roughly 2600 institutions of higher education in the country.

Some 350 colleges and universities are controlled by the Roman Catholic Church. One of the major dilemmas of Catholic higher education, according to Andrew Greeley,[1] is that many of the Catholic colleges are "seeking the same objectives as the rest of American higher education seeks, (while) also pursuing objectives which are uniquely their own." Thus, an excerpt from one college catalogue:

> It is the aim and purpose of ——— college to assist students in the attainment of the highest perfection of intellect and will of

> which they are capable, in order that their earthly life may be spent in the service of God and man, and their eternal life in the blessed and complete happiness of union with God in heaven.

Some 450 colleges are affiliated with one or another of the Protestant denominations. Strength of the ties varies greatly from college to college, ranging in religious stance from tightly fundamental to highly liberal. While the clear trend over the years has been toward a weakening of denominational ties, many continue to "keep the faith." A catalogue excerpt:

> The founding ideal of ———— is to provide young men and women of the twentieth century the opportunity to investigate truth from the position that all areas of true knowledge and divine revelation are compatible.

It is not easy to do justice to the rhetoric of "liberal arts education." Much of the more recent outpouring may be a natural response to the somewhat embattled condition of the liberal arts—under attack as it is by populist and vocational forces, advanced programs in the high schools, and pressures for graduate preparation and academic professionalism. Indeed, Jenks and Riesman speak of the "university college," as they call it, the college that prepares people for graduate school, as the key consequence of what they call the "academic revolution."[2] All this said, the goals of liberal arts colleges are commonly couched in terms of mastery of a basic intellectual heritage together with development of intellectual values and styles, aesthetic sensitivity, and attitudes of social and moral responsibility.

The scores of public four-year colleges across the country, while giving lip service to liberal arts purposes, are primarily in the business of vocational and pre-professional training, especially of teachers. The purposes of the public junior colleges, of which there currently are some 800, enrolling a third to a half of all the freshmen and sophomores in the country, generally involve providing terminal technical and vocational training, the first two years of college for students transferring to four-year institutions, and a range of public services for individuals and agencies in the local community.

Finally there is a variety of specialized institutions, such as technical institutes, theological schools, and art colleges, whose purposes are more narrowly drawn:

Institutional Goal-Consciousness

> The primary purpose of the undergraduate school of————, as stated by the Trustees, is "to provide a collegiate education which will best train the creative type of scientist or engineer so urgently needed in our educational, governmental, and industrial development."

II. Some Institutional Uses Of Institutional Goals

Let me move on now to outline several ways that clear conceptions of institutional goals may be put to use on the campus. Some of the uses, such as the first two, are fairly general; the others are more specific. This listing is certainly not exhaustive, and the various entries are not independent either in the abstract or in practice.

(1) *As fundamentals of policy.* A conception of institutional goals may serve as the basic element in a formulation of the institution's policy, philosophy, or ideology. Stated goals help to tie together assumptions, values, and hopes for the institution into a coherent policy that then provides standards for present and future college operations.

A policy formulation containing clearly enunciated goals also enables individuals and agencies external to the campus—prospective students and staff, governmental units, funding agencies, for example —to be clear about the college's *raisons d'etre* and what can be expected of it.

(2) *As general decision guides.* A policy-as-goals statement, especially if democratically conceived and widely understood in the college community, should serve the entire community as a framework for reaching decisions, solving problems, allocating resources, and accordingly ordering actions in certain directions and not in others. The goals can be used as decision standards by all campus groups: by the trustees, for example, in approving architect's plans for the new student union, by department chairmen in recruiting faculty, by students in considering revisions to the judiciary code, and so forth.

(3) *In planning.* As institutions and systems have had to cope with expanding enrollments, and, now, with limited finances, they have been forced to engage in some sort of planning, be it crude or fairly systematic, short or reasonably long-term. The importance of goal-setting at the outset of the planning process is universally emphasized

by professional planners in both educational and noneducational settings.

Planning in higher education, of course, goes on at many levels, and goal consciousness, it may be argued, is critical at all of them: in the most futuristic thinking about national and international systems, in planning Siwash's next five years, in year-to-year budgeting in single institutions and their component units.

This last is particularly important for purposes of this paper. In the past few years there has been a notable infusion into higher education of various public finance analysis and management methods, of which perhaps the best known goes by the letters "PPBS." An important element in almost all PPBS and related models is identification of goals or "outputs" (the economists' preferred term). Various planners on college campuses who have written about the matter, however, pointed to the very great difficulty, in practice, of developing usable conceptions of college goals.

(4) *In management information systems.* A response chiefly to increasing university size and complexity, the management information system (MIS) is another new administrative tool currently enjoying a considerable vogue. MIS's have been developed to provide decision makers with relevant and timely ("computerized") data, use of which presumably leads to better decisions. As with the more general planning process, "a management information system calls for the clear explication of objectives and exposé of the processes by which the objectives are reached."[3]

(5) *In institutional evaluation.* The field of educational evaluation, as this audience hardly needs to be told, has grown into a new professional specialty with an evolving set of principles and techniques all its own. Evaluation has come to be understood as a process of information gathering focused on the extent to which an educational program is achieving predetermined objectives. Evaluation information is passed along to educational managers either (or both) during the course of the program or at its termination; in either event, the purpose is program improvement, meaning maximization of program objectives.

For the most part, educational evaluation has occurred in elementary and secondary schools and has been focused on specific courses or programs. Evaluation, however, can conceivably be extended to cover an institution's total educational program, and it is beginning

to take hold in higher education. Many universities have institutional research offices; there is a nationally organized Association for Institutional Research (AIR); a number of consortia of colleges have been formed to promote cooperative institutional research; and a range of assessment instruments have become available.

(6) *In implementing accountability.* "Accountability" is another concept sweeping across the educational landscape, especially, so far, in lower rather than higher education. Leon Lessinger, late of the U. S. Office of Education, and perhaps the father of the concept, has said:[4]

> In its most basic aspect, the concept of educational accountability is a process designed to insure that any individual can determine for himself if the schools are producing the *results promised.*

He goes on to say:

> Like most processes that involve a balancing of inputs and outputs, educational accountability can be implemented successfully only if educational objectives are clearly stated before instruction starts.

The distinction between evaluation and accountability implementation is not entirely clear, at least to me. Accountability seems to be concerned more with end results and less with process or means, has more a financial and efficiency focus, is more of a public operation (like an audit by an external agency), and carries a greater implication of finality—of hard judgments about total programs (rather than of trying to improve on existing ones). While prospects for this sort of accountability may seem distant for most colleges and universities, it seems to me the writing is on the wall.

III. ETS Research on Institutional Goals

What I am going to do now is lay out for you an R&D saga in three chapters. The first is of the past, completed; the second is underway right now; and the third is on the drawing boards.

Actually there is also a kind of introduction to the epic. Three to

four years ago several of us in Princeton—Pat Cross, notably—began thinking about the need for institutional goal definition, mainly in the context of evaluation. Any viable model for evaluating the effectiveness of a college, we thought, had to start with the institution identifying its goals. At any rate, in late 1969—and now we are into Chapter I of the epic—an opportunity presented itself in the form of a grant from the Regional Education Laboratory for the Carolinas and Virginia (RELCV) for a study aimed at defining the goal structures of five colleges that were working with the Lab in developing its Administrative-Organization System (AOS) model. Norman Uhl, then of ETS's Southeastern Office, was the project director—and Uhl set himself the task of testing out what is known as the Delphi technique in achieving consensus among diverse campus constituent groups regarding the goals of each respective institution. Thus, the objectives of the project were, first, to test the usefulness of the Delphi technique as a way of obtaining consensus about goals, and, second, to learn, for purposes of institutional self-study, how diverse constituent groups, on and off campus, perceive the goals of the respective colleges.

So, what is the Delphi technique? Briefly, it involves the following four steps:

(1) participants are asked to list their opinions on a specific topic, such as recommended activities or predictions for the future;
(2) participants are then asked to evaluate or rate the total list against some criterion, such as importance, chance of success, etc.;
(3) each participant receives the list and a summary of responses to the items and, if in the minority, is asked to revise his opinion or indicate his reason for remaining in the minority;
(4) each participant again receives the list, an updated summary of responses, a summary of minority opinions, and a final chance to revise his opinions.

Thus, applied to the matter of college goals, the Delphi method has the potential for providing an institution with (1) a range of ideas about goals, (2) a priority ranking of the goals, and (3) a degree of consensus about goals.

In Uhl's study, the major departure from the standard Delphi procedure was to omit the usual first step of asking respondents, in open-ended fashion, to list ideas. Instead, step one consisted of administering a previously prepared experimental Institutional Goals Inven-

tory (IGI). Figure 1 is an excerpt from that first inventory. The items were written by a group of ETS psychologists and sociologists, under the general direction of Uhl, in January 1970. This preliminary IGI was distributed to some one thousand individuals spread across samples of undergraduates, graduates (where applicable), faculty, administrators, trustees, and alumni from the five institutions, plus a small cross-section of people in the local community. The instrument consisted of 105 statements covering the 18 kinds of goals listed across the top of Figures 2 and 3.

Respondents rated each item on a five-point "importance" scale, and each item was rated in terms of both (1) perceptions of the existing goal structure, and (2) what the institution's goals ought to be (i.e., they gave "is" and "should be" responses). Eighty-five percent of the questionnaires were returned.

The second step was to distribute the same form to the same one thousand people, with two differences: the first was that the modal (most frequent) "is" and "should be" responses for each item were indicated on the form; and, second, individuals who this second time assigned a rating different from the step one modal rating were asked to write out briefly the reasons for their rating. Return rate for the second questionnaire was 80 per cent.

The third step was a repeat of the second, with the exception that this time separate sheets containing a summary of the minority opinions for each goal statement for the institution in question accompanied the inventory. Thus, in step three, participants responded to the IGI, knowing, for each item, both the modal response on the previous administration and the kinds of reasons people had for not giving the modal response. Return rate: 75 percent.

A small sample of the results is presented in Figures 2 through 5. Institution A is a church-related university located in South Carolina. What is noteworthy about the Figure 2 profiles is their similarity—how close together they are. It is interesting to speculate about what this means. Does it mean satisfaction? Does it mean complacency? Does it mean the end of aspiration?

Figure 3 depicts a predominately black university in North Carolina. Of the five institutions in the study, this was the one with the largest discrepancy between the "is" and "should be" profiles. The differences must mean that people are dissatisfied. Yet I think they also mean that there is a large measure of aspiration, that people want to move in a

Figure 1

*Excerpt from the Preliminary Institutional Goals Inventory Used in the RELCV Study**

GOALS		of extremely high importance	of high importance	of medium importance	of low importance	of no importance
To help students develop social skills, poise, and confidence.	is	☐	☐	☐	☐	☐
	should be	☐	☐	☐	☐	☐
To help students develop the ability to apply critical thought to all areas of life.	is	☐	☐	☐	☐	☐
	should be	☐	☐	☐	☐	☐
To promote concern in students for the well-being of others.	is	☐	☐	☐	☐	☐
	should be	☐	☐	☐	☐	☐
To ensure that students will be well qualified for a vocation.	is	☐	☐	☐	☐	☐
	should be	☐	☐	☐	☐	☐

* Uhl, Norman P. *Encouraging Convergence of Opinion, through the Use of the Delphi Technique, in the Process of Identifying an Institution's Goals.* PR-71-2. Princeton, N. J.: Educational Testing Service, February, 1971.

Figure 2

Institution A: Profiles of "Is" and "Should Be" Mean Responses
Third Questionnaire; All Constituent Groups Combined (from Uhl, 1971)

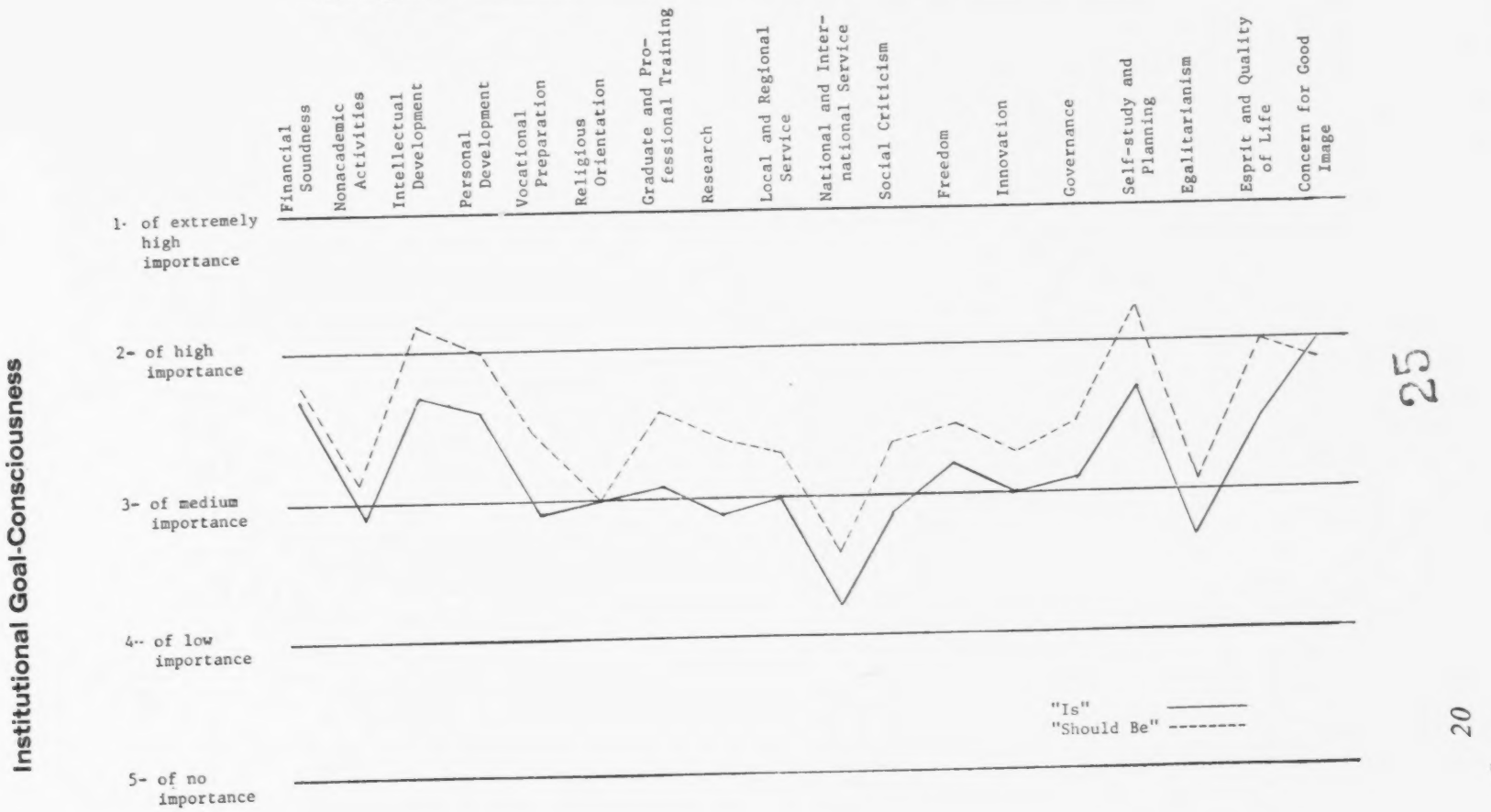
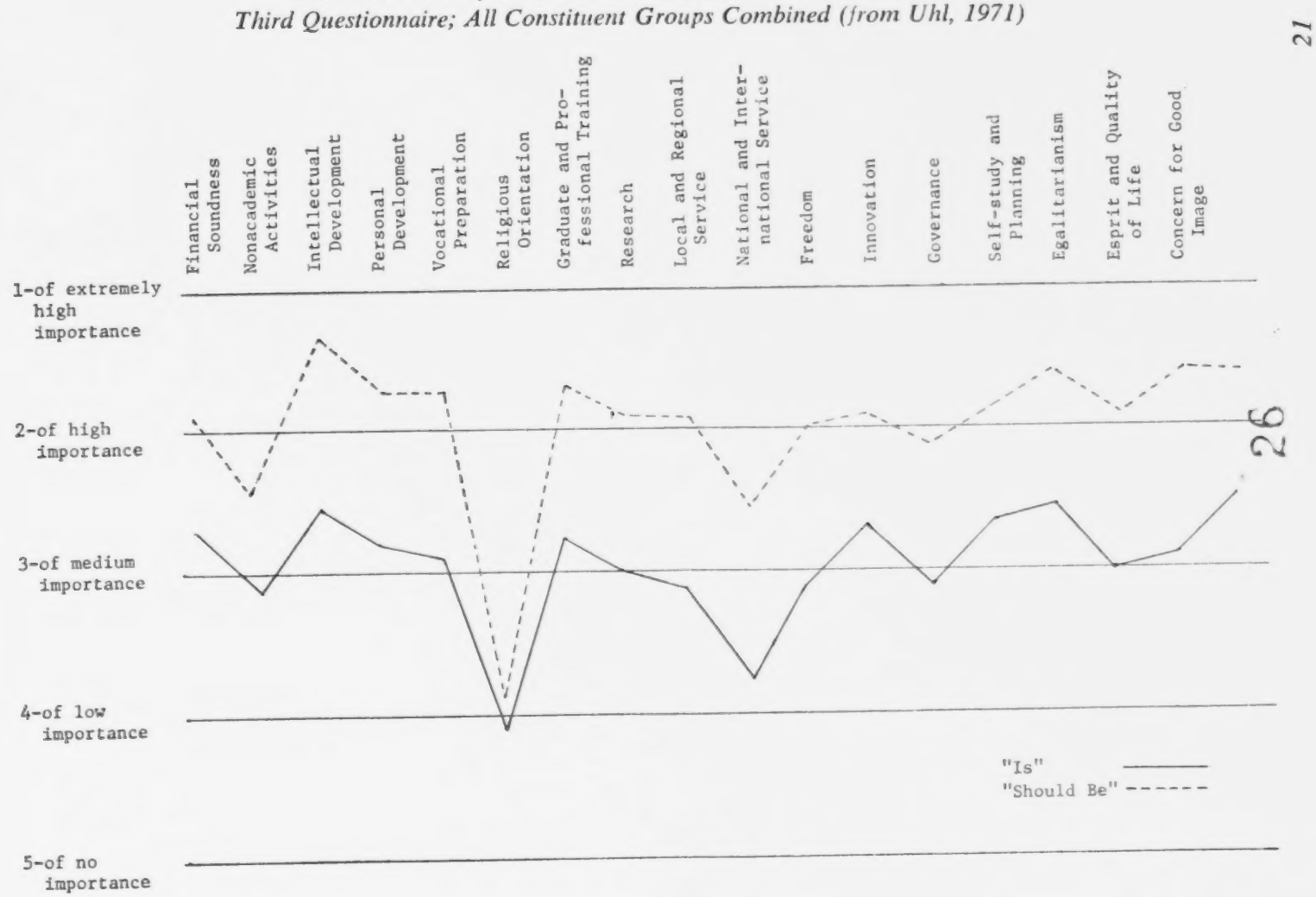


Figure 3

Institution B: Profiles of "Is" and "Should Be" Mean Responses
Third Questionnaire; All Constituent Groups Combined (from Uhl, 1971)

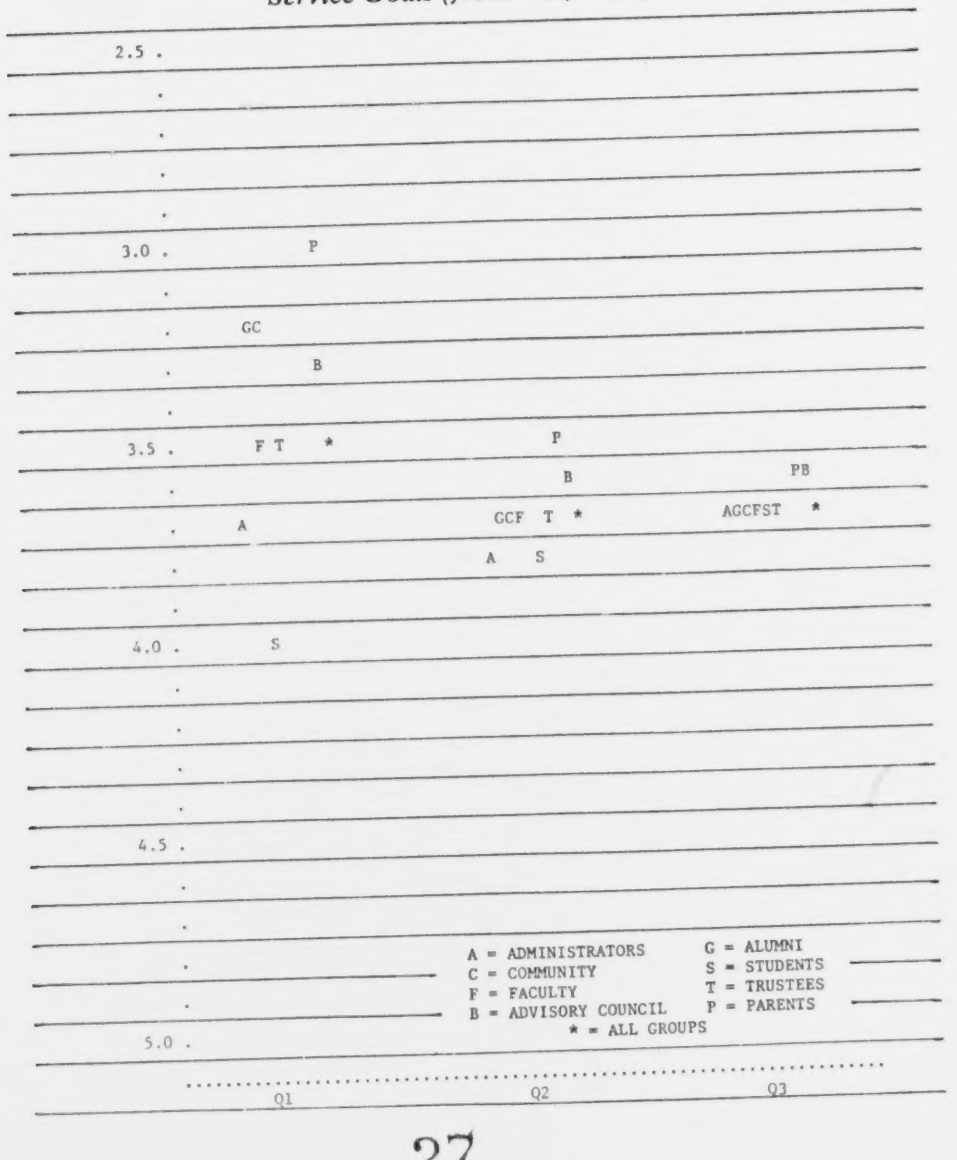


great many directions (except towards a religious orientation).

Figure 4 illustrates an instance of Delphi-"encouraged" goal convergence—specifically, regarding "National and International Service" (as an institutional goal) at the aforementioned South Carolina uni-

Figure 4

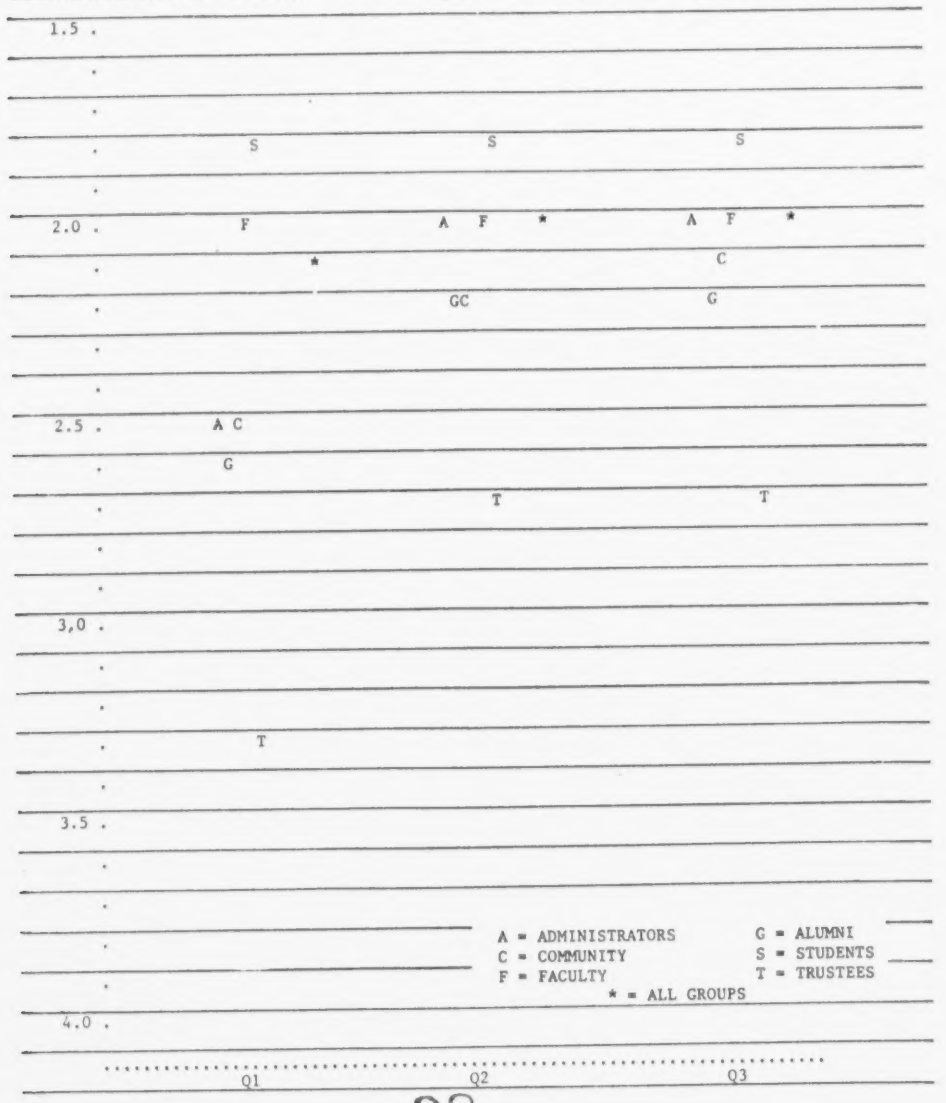
Institution A: Plots of Constituent Group Means for Three Questionnaire Administrations "Is" Ratings for National & International Service Goals (from Uhl, 1971)



versity. The letters represent constituent groups: "P" stands for Parents, "G" for Alumni, and so forth. The three clusters correspond to the three successive questionnaire administrators (Q1, Q2, Q3, across the bottom). On the first administration, the eight groups were quite

Figure 5

Institution C: Plots of Constituent Group Means for Three Questionnaire Administrations "Should Be" Rating for Freedom Goals (from Uhl, 1971)



far apart. On the second, the plots were closer, and on the third they were practically together (only two groups slightly deviant).

Figure 5 shows an instance where very little convergence took place. Institution C is a liberal arts college in Virginia. Freedom, as a goal area, involved academic freedom, personal freedom, allowing people to live their own lives, and so forth. Students and faculty did not shift at all from the first to the third questionnaire. The trustees moved somewhat. With low scores indicating high importance, the students (naturally) attached the greatest importance to freedom on the campus, and the trustees, the least. The Freedom and Religious Orientation goal areas consistently showed the least convergence at all five colleges; certain fundamental moral convictions seem to be relatively immune to Delphi influence.

In looking over all the Delphi plots (18 goal areas, "is" and "should be" ratings, five colleges), Uhl and I were impressed by the large number that showed definite convergence. Figure 4 is a selected case, to be sure; yet some three-quarters of all the plots depicted clear and substantial convergence. (To what extent Delphi-induced changes signify permanent attitude or behavior changes is probably an open question.) In general, off-campus constituent groups shifted more (toward the on-campus groups) than did the campus groups, especially on the "is" ratings, reflecting, I suspect, a fairly rational deference to the greater knowledgeability of the on-campus groups (faculty, administrators, etc.). A final clear finding from Uhl's study[5] was that considerable convergence took place *within* constituent groups, as well as between them. Standard deviations were almost invariably lower on the third than on the first questionnaire administration for a given constituent group on a given goal area.

The second chapter in this saga began just last February (1971), when some decisions were made to the effect that ETS would move fairly quickly to develop a goals inventory to be made available to colleges and universities in the fall of 1971, this coming fall. Norman Uhl had left ETS to return to university teaching and research, and the job of working with the IGI fell to me.

First of all, it was pretty clear that we couldn't market an instrument that had only been tried out at five institutions in the Carolinas and Virginia. In March, then, we began organizing a small pretest of a revised IGI, to take place in the West in May. Not much lead time, and May is probably the worst possible month to try to arrange for

students and faculty to fill out questionnaires. We invited a dozen colleges to participate, hoping to get four, we ended with ten.

Also in March, working with Uhl as a consultant, a number of additional analyses of the RELCV data were carried out. We attempted to determine whether items clustered together so that we could make decisions about which items from the preliminary IGI should be relevant for the new inventory. Included were four factor analyses, item intercorrelations for "is" and "should be" ratings—separately for students and faculty, as well as item means and standard deviations for these four groups.

We, Barry Morstain* and myself, began working with these data on April 5. We began eliminating items from the original instrument: items that were highly correlated, since we wanted every item to yield essentially unique information; items that were highly skewed or for which there was little response variation; items that showed little difference between the mean "is" response and the mean "should be" response.

At the same time we were working toward a slightly different conceptualization than the one embraced by the preliminary form. An Altruism/Humanism category was added—in part as a supplement to the Traditional Religiousness category, and an Accountability/Efficiency cluster of items seemed appropriate to the times. In addition to providing a focus for item writing, a conceptualization such as this one (Figure 6) serves at least two purposes: first, it provides a theoretical description of the domain—in this instance the domain of college and university goals—that the instrument is intended to measure; second, it has the more practical purpose of suggesting ways of scoring groups of items together, as scales or indices, which in turn make for convenience in summarizing and interpreting the results of the inventory on the campus. By this last, I mean it is often advantageous to be able to report research results in terms of 20 or 22 scale scores rather than in terms of the frequency distributions on 100 or 110 individual items.

Scale scores would also be more reliable than the responses to individual items. People at ETS tend to put great store on test reliability; they build long tests and obtain reliabilities in the high .90's.

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* Acting Director, Academic Planning and Evaluation, University of Delaware, Newark, Delaware.

Thus the College and University Environment Scales (CUES), authored by Robert Pace at UCLA, has a small number of fairly long scales with high reliabilities. A more recent instrument from ETS, the Institutional Functioning Inventory, contains eleven 12-item scales

Figure 6

A Tentative Conceptualization for the Revised Institutional Goals Inventory (IGI)

Output Goals

1. Academic Development (acquisition of knowledge, academic mastery, etc.)
2. Intellectual Orientation (as an attitude, style, commitment to learning, etc.)
3. Individual Personal Development (of one's unique human potential, etc.)
4. Humanism/Altruism (idealism, social concern, etc.)
5. Cultural/Esthetic Awareness (appreciation, sensitivity to the arts, etc.)
6. Traditional Religiousness
7. Vocational Preparation
8. Advanced Training (graduate, professional)
9. Research
10. Meeting Local Needs (community public service, etc.)
11. Public Service (to regional, state, national, international agencies)
12. Social Egalitarianism (meeting educ. needs of people throughout the social system)
13. Social Criticism/Activism (toward change in American life)

Support Goals (internal college goals intended to help realize the "output" goals)

14. Freedom (academic, personal)
15. Democratic Governance (emphasizing structural factors)
16. Community (emphasizing attitudinal factors—morale, spirit, ethos)
17. Intellectual/Esthetic Environment (intellectual stimulation, excitement, etc.)
18. Collegiate Environment (extracurricular activities, social life, athletics, etc.)
19. Innovation
20. Evaluation and Planning
21. Accountability/Efficiency
22. External Relations (toward understanding and mutually beneficial relations between campus and external constituencies)

with reliabilities averaging about .90. In building the IFI, we followed the customary item-analyses procedures designed to maximize internal consistency reliability. We got good reliability, from fairly short scales, but at some cost in making every item work—yield unique information for the user college. Items in a given IFI scale tend to intercorrelate in the .70's. With the IGI we will be covering a broader conceptual domain [22 goal areas], with shorter and less reliable scales, but every item will be doing work—providing unique information to the college. I expect that the five items in a given IGI scale will intercorrelate about .40 on the average. IGI reliabilities will not be ridiculously low; Uhl obtained coefficient *alphas* in the .70's with four, five and six item measures.

Once we were satisfied with the modified conceptual framework, and having decided that each scale would consist of five items, we began formulating new goal statements—entirely new sets of items for the new constructs such as Accountability/Efficiency and Altruism/Humanism, and additional items to round out the existing categories where not enough of the old items survived the various statistical criteria. By mid-April we had a long draft inventory for sharing with colleagues in Berkeley and Princeton. The following week was spent haggling about phraseology and generally worrying the items into forms we were satisfied with. (Parenthetically, many people look down on item writing as a menial task, something you turn over to research assistants. I personally think that writing questionnaire items that really do good work for you is a fairly challenging intellectual task.) Also during that week we decided that "Joe College" was still alive on many campuses, and that we indeed needed items about bigtime athletics, fraternities and the like—i.e., a Collegiate Environment scale. Then, at the last minute, on the advice of friends in Princeton, we went from what was a single "intellectual development" category to the twin scales of Academic Development and Intellectual Orientation. The eventual revised IGI, then, consists of 110 goals statements—five for each of 22 goal categories (see Figure 6).

During May, right now, the colleges are distributing the form to samples of 100 or 150 students and faculty. One college is also including their trustees and another its administrators. Still another is planning a fairly large administration to alumni and parents. We will do the scoring in Berkeley in June and send back to the colleges item tabulations and mean scores for the 22 scales, for both the "is" and

"should be" ratings, separately for students, faculty, and trustees.

Then in July we will organize a comprehensive review of everything done thus far. We will consider the conceptualizations, items, and hard data from both the RELCV and west coast studies. We will look at the "soft data"—the critical comments from respondents and the new ideas about goals offered on the last page of the inventory. More important, we will want to make use of one or more panels of informed and insightful people from the campuses, who can help us insure that the instrument, insofar as possible, covers the domain of institutional goals for the broad spectrum of American higher education. More important than any of the statistical criteria, it seems to me, the instrument must deal with issues that colleges are struggling with as they formulate and modify institutional policy and practice. Such issues and goal conceptions, of course, are constantly changing and evolving. I would hope, myself, that any operational IGI would assume revision, perhaps on a yearly basis.

At any rate, from out of this comprehensive review will come a final, operational IGI, printed in machine-scorable format, and distributed and scored through ETS's Institutional Research Program for Higher Education (IRPHE), the program that distributes the College Student Questionnaires (CSQ), CUES, the IFI, and the other instruments and services for institutional self-study.

Let me quickly outline tentative plans for the next one to two years —the third chapter in this stirring story.

When the IGI becomes available in the late fall, there will be no norms for the instrument, no comparison data against which a given college can interpret its own IGI data. The plan is to carry out a national norming study during the 1971–1972 academic year, with the cooperation of a sample of perhaps 100 colleges and universities. It will be a stratified rather than a random sample. We will want to have, say, 10 each of public universities, private universities, Protestant colleges, public junior colleges, and so forth, so that separate norms can be assembled for some ten different types of institutions. At each institution the form will be administered to samples of up to 150 faculty, perhaps 200 to 300 students, and to all the members of the governing boards. Each set of norms (e.g., for public universities), then, will consist of a rather substantial amount of data—item and scale norms, for both the "is" and "should be" responses, for faculty, students and trustees.

During the following year a manual for the use of the inventory will be prepared, which, in addition to most of the usual kinds of information found in test manuals, will also contain an extensive discussion of how a college might make use of the IGI data in setting goals and in otherwise reaching decisions and drawing plans in various areas of institutional policy and practice.

The next two years' work, however, will represent more than just a norming study. If all goes as anticipated, the project should also be a *major* substantive study of purposes in American higher education—in particular, of how people at different types of colleges across the country understand the goals of their institutions—both as they perceive them now, and as they think they ideally should be. Furthermore, I am hoping that we can study what various groups of people off the campus believe about the goals in higher education in America. It should be possible, perhaps with the cooperation of graduate students at the state university in, say, six state capitals, to administer the IGI to people such as state legislators, high school teachers, business leaders, construction workers, policemen—with the local public university as the institutional referent.

IV. Conclusions

(1) Perhaps it is gratuitous to say that the college intending seriously to redefine its goals must first consider whether or not it indeed has the power to define its own directions and then to act in pursuance of such new understandings. I say this mindful of the clear trend of more and more colleges to find themselves deferring to higher authorities. This question of autonomy is particularly unavoidable in the public sector, with the rise of statewide systems, coordinating bodies, and master plans, together with seemingly hardening orthodoxies about what certain kinds of colleges are supposed to do—about the role of the public junior college, for example.

Should all the campuses in a system be similar or "comparable," or should each strive for distinctiveness? There has to be coordination in a multi-campus system, no doubt about it. Yet, there also has to be, I am equally certain, opportunities for meaningful participation by the people involved in the educational work of the campus, in determining the content and process of that work. Reaching accommo-

dations on these and related issues will require administrative statesmanship of the highest order.

(2) Institutional goal determination, it seems to me, has two end products: (a) identification (statement) of goals, and (b) establishment of priorities among the goals. An institution's "goal structure"—its rank-ordering of goals—can be said to be "determined" when some level of consensus has been reached through a process that is democratic and participatory. The goal determination process must universally (on the campus) be regarded as fair if the resulting goal structure is to have legitimacy, if it is to be accepted as morally proper in the college community. These are heavy problems, elaboration of which is well beyond the scope of this talk.

(3) Whatever the specific goal determination mechanisms adopted may be, the responsibility for setting the process in motion, for laying out the charge, and for dealing with the autonomy question, lies with the chief campus administrator. This is the conclusion of a number of people who have studied the situation rather more closely than I have. Determination of college mission, in short, is a critical leadership function of the college president.

(4) Institutional goals would profitably be conceived in two categories:

[a] Outcome goals. These are the desired states the college seeks to realize—characteristics of graduating seniors, kinds of research and development to engage in, kinds of public services to perform, and so forth. These goals, I should think, would be stated at about the level of specificity of the goal statements used in the two studies I mentioned.

[b] Support goals. These are the goals, attainment of which facilitates reaching the outcome goals. They have to do with instructional measures, educational environment, and the like. In a sense, they are planning goals (e.g., of a five-year plan): to double the library holdings, or the number of fine arts faculty; to establish a center for ecological studies or a remedial skills center, for example. Support goals, in short, are intended to optimize the previously identified outcome goals.

(5) The mechanics of institutional goal determination might well involve both a committee-like task group and some form of opinion or values survey, such as the IGI. The task group should include representatives of the various campus constituent groups, including trustees

(who presumably have encouraged the goal analysis effort from the start). Task group members could be elected by their respective constituencies, or they might be volunteers. Institutions having an All-College Assembly or some other unicameral governing body could form a goals determination subgroup from the membership of the unicameral body.

Numbering about twelve members and chaired by the college president, an important job of the Task Group on Goals is to organize, help plan and implement, and generally oversee a goals survey. Once the survey is completed, the Task Group would conduct open hearings on the survey results, and eventually prepare a report setting forth a goals structure for the college.

(6) Finally, it seems essential in these times that colleges articulate their goals—to give direction to present and future work, to provide an ideology that can nourish internal cooperation, communication and trust, to enable assessment of the institution as a means-ends system, to afford a basis for public understanding and support. Indeed, the college without the inclination or will to define itself, to chart a course for itself, can look forward either to no future, to a kind of half-life of constantly responding to shifting pressures, or to a future laid down by some external authority. Neither prospect pleases.

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The Commission on Non-traditional Study—Who Needs it?

JOHN A. VALENTINE

The Commission on Non-traditional study is in the early springtime of its life. It has roots. Its roots are in an apparently hospitable soil and the weather is favorable. Above ground it has a stem and rudimentary branches. Its fruits, by which it will be known, are in the future, however. At this time one can only speculate, anticipate, and hope.

About its roots. Five fibers are prominent in the root structure. Their names all happen to start with C. The first is James B. Conant, former president of Harvard University and ambassador to West Germany, and author of books on American secondary school education. He invented Educational Testing Service, or by his own more modest account (in his autobiography, sub-titled Memoirs of a Social Inventor) was at least instrumental in promoting the idea and plan for the merger of testing programs on which ETS was based.

The second is Henry Chauncey. During his long and productive tenure as president of ETS he was an early, vigorous, and persistent advocate of credit by examination at the college level.

The third is the Carnegie Corporation of New York. It has long supported with vision and funds the idea of alternative avenues for college study, credit and degrees. It has given generous support to the College Level Examination Program. Alan Pifer, president of Carnegie, has taken the lead in calling attention to the possibilities of external degree arrangements in this country. Carnegie recently joined with the Ford Foundation in making grants of one million dollars to the State University of New York, for the development of off-campus programs of study leading to degrees at colleges within the SUNY system; and eight hundred thousand dollars to the New York State Education Department for the development of New York Regents degrees, based on examinations. The Commission is supported by a grant from Carnegie of $140,000.

Fourth is the College Entrance Examination Board. The College

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Board has sponsored the Advanced Placement Program, which has helped many college freshmen start out with credit for college-level high school study. It has more recently developed the College-Level Examination Program. It has also sponsored a series of Commissions —the Commission on Mathematics, the Commission on English, and most recently the Commission on Tests—which provide traditions and experience for this new commission.

Finally, I feel compelled to mention candidates—candidates by the millions who have taken the CEEB Scholastic Aptitude Test and Achievement Tests, and by paying for the privilege, pleasure or pain have provided much of the cash for the facilities, staff and good works of the College Board and ETS.

It was just about fifteen months ago, at a joint meeting of the College Board and ETS executive committees, that it was decided the two organizations should explore how they might advance and support more widespread opportunities for college-level study and its recognition. Jack Arbolino, on the College Board staff, and John Valley, on the staff of ETS, were commissioned to study the possibilities. They produced background papers, and were led by their own findings and deliberations to propose the formation of a national university, which they felt would benefit colleges as well as a wide variety of individuals. With the Arbolino-Valley papers as stimulus, the Board and ETS officers and trustees eventually settled on a joint, two-part approach.

One part involved the establishment of an Office of External Degree Plans, to serve as a link between both the Board and ETS, on one hand, and on the other hand, institutions and agencies involved in developing external degree programs and interested in the instruments and services the Board and ETS are able to provide or to develop. The Office of External Degree Plans is now in being. John Summerskill will serve as Director of this office, starting next fall, and in the meantime George Hanford, Executive Vice President of CEEB, is serving as Acting Director.

The other part involved the creation of a Commission on Non-traditional Study, also to be sponsored jointly by the College Board and ETS, but to serve independently, in the public interest, as a body designed to consider from a national perspective the full range of issues raised by the expanded use of non-traditional forms of study and its recognition, including external degrees.

A proposal for such a Commission was submitted to Carnegie in

December; the proposal was accepted and funds granted in January; the Commission was appointed in February; and it met for the first time, in Sarasota, Florida on March 8-9. At this meeting, chaired by Commissioner Samuel B. Gould, the Commission made substantial progress in clarifying its charge and the scope of its concern; also in organizing itself for the work ahead.

The soil for the Commission. There is little doubt that the soil must be fertile these days for the growing of a lush variety of options for getting college credits and degrees, for learning acquired inside and outside of classrooms—within the walls and outside the walls of colleges—in this country and also abroad—books, TV, computers and tapes—at work and out in the community—from service in the Armed Forces, on land, sea and in the air. One has to only look at what is going on here in California, in New York, and in many other states—at dozens of colleges, including those participating in University Without Walls—in other countries, notably England, with its Open University—and in other likely and unlikely places.

There are many answers to the question why all these developments are occurring. In general, there is a large and growing gap between the goal of educational opportunities after high school for all who need and want them, and the facilities available to achieve this goal. There are millions of Americans, such as housewives, workers, older people, and the very poor, for whom no real opportunities are available. There are many others, including some of college age, for whom opportunities are available but fall short of satisfying the real educational needs. There are many colleges, universities and systems confronted with the challenge of educating more students more successfully, with reduced budgets.

There is spreading within the public a sense that the old, familiar academic ways obstruct the development of student minds, talents and personalities.

It is one thing to analyze the soil for the nourishment it provides to programs of non-traditional study or credit. It is another thing to analyze its power to nurture and sustain a Commission set up to influence such programs. This power is not so certain. To be sure Commissions seem to grow like weeds in this country—like weeds many choke, however, live and die having served no apparent purpose. From the response to the Commission so far it is clear that many look hopefully to it for wise guidance and productive stimulation. This is en-

couraging, and also very challenging.

A word about the Commission's Morphology. Above the surface the basic form of the Commission may be observed, with some features quite distinct, and others rudimentary.

First, there is the Commission itself.* The 27 members include the heads of private colleges and of public institutions and systems. Four-year and two-year institutions are represented. There are members from the worlds of continuing education, accreditation, educational technology, libraries, labor, government, and educational associations and institutes. They come from all major quadrants if not all corners of the United States, with Washington, D. C. inflating the Eastern quota. The presidents of the College Board and ETS are members ex officio.

A commission of workable size cannot possibly include representatives of the many groups with a stake in the sprawling area of non-traditional study. We have received letters or phone calls urging the appointment of additional members to more adequately represent the young, the poor, minorities, women, two-year colleges, secondary schools and a variety of professional, accrediting, and testing interests. I expect there are many who have not written or called who have concerns equally understandable and valid. The Commission is also concerned and plans to establish working relationships with other groups and agencies to the extent these are feasible.

The Chairman, Samuel B. Gould, is chief executive of the operation, Chancellor emeritus of SUNY, and is now a director of McKinsey & Company. He is spending a substantial fraction of his time on the Commission, and has an office in space made available by the College Board in New York City. As many of you know, he was chancellor at the University of California in Santa Barbara not many years ago. He was also for a time head of the Educational Broadcasting Corporation.

I am assigned full time as Executive Secretary, as is an Executive Assistant, Miss Florence Kiey, and we have secretarial assistance.

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*Samuel B. Gould, M. Robert Allen, Howard R. Bowen, Mary I. Bunting, Henry Chauncey, Arland F. Christ-Janer, Fred C. Cole, Joseph P. Cosand, Bertram H. Davis, Walter G. Davis, Frank G. Dickey, W. Todd Furniss, Richard C. Gilman, Cyril O. Houle, Rev. C. Albert Koob, Elizabeth D. Koontz, Charles A. LeMaistre, John W. Macy, Jr., Leland L. Medsker, James Parton, James A. Perkins, Alice Rivlin, Felix C. Robb, William Schuman, Stephen H. Spurr, William W. Turnbull, Clifton R. Wharton, Jr.

Commission on Non-traditional Study

The Commission will function for two years, with its final recommendations expected in the fall or winter of 1972–73. It will probably hold six meetings, and in addition may sponsor an invitational conference, to serve perhaps as a useful sounding board for its initial findings and recommendations. As mentioned above, it has so far met once, in Sarasota, on March 8–9, 1971. The second meeting will take place in July, 1971, in the mid-west. The Commission expects to meet in various parts of the country, to give expression to its national perspective.

At its first meeting, the Commission settled on the following one-sentence statement of its charge:

> The Commission will be concerned with increasing access to, and recognition of, post-secondary learning by whatever means such learning is or could be achieved.

In organizing itself for its task, the Commission has established six subcommittees:

1) *Concepts.* One will identify and examine the concepts underlying various facets of non-traditional study. It will seek to clarify these in order to make the discussion of issues both within the commission and in the public at large, more productive.

One can only guess at this point what the concepts are that this subcommittee will focus on.

A fascinating question despite the many attempts already to answer it is "what is a degree?", or more specifically "what does the American baccalaureate represent, in theory and in actual fact?" Where does the concept of general education fit in? What is the place of academic specialization? Of vocational preparation? Of affective as well as cognitive learning? Of moral and personal growth?

The Commission at its first meeting talked about the problem of placing in proper balance the interests of individuals, institutions, and society. This certainly cries for a sound conceptual framework.

A concept that certainly bears clarification is that of "non-traditional study" itself. The Commission is taking an open, flexible position as it moves toward its definition of what is non-traditional. I observe it attending to innovative possibilities in the classroom as well as outside, on campus as well as off campus, and in processes of guidance as well as teaching and certifying. Non-traditional ways of

putting together rather traditional forms of study, credit and degree-granting seem also to be very much in the ball park.

Todd Furniss, of the American Council on Education, is chairman of this subcommittee.

2) *Means.* A second subcommittee will focus on the *means* available for teaching and learning at the post-secondary levels, including the roles of teacher and student. It will include the residential experience, work and community involvements, correspondence, radio, TV, cassettes, computers and other technological devices. It will presumably sort these out, and recommend when and how each can be used most effectively.

James Parton, President of Encyclopaedia Britannica Educational Corporation is chairman.

3) *Recognition.* Another subcommittee will deal with the *recognition* of post-secondary learning. What are the ways of validating learning? What kinds of evidence can and should be used to establish that an individual has achieved mastery of a subject or skill? What are the strengths and limitations of standardized tests? Of faculty evaluations? Of biographical and work records? How should the bits and pieces of evidence be translated into credits? into degrees? What are the alternatives to credit bookkeeping?

Frank Dickey, Director of the National Commission on Accrediting is the chairman.

Before taking on this new assignment, I was involved for eleven years with the Admissions Testing Program of the College Board—the Scholastic Aptitude Test and subject-matter Achievement Tests. From this experience I bring a sense of confidence in the usefulness and values of external examinations, but also questions about their applicability on a greatly expanded basis to the post-secondary scene.

One question is that of the creditability of standardized tests in the eyes of college faculty members. For external examinations to bear the burden, entirely or partially, of college credits with genuine value, their acceptance by large and influential segments of the college teaching community would seem to be a necessary condition. I doubt if this acceptance exists, and I suspect it will not come about easily. I sense a considerable lack of communication between those engaged in educational measurement and the great majority of college teachers. I also sense a ready skepticism or antipathy on the part of many college teachers.

The resistance I speak of I see as having its sources in emotion as well as reason, and in as much misinformation as information. I believe, however, that tests for college credit, such as the College Level Examinations, may be exposed to a more searching analysis of their real nature and relevance than they have so far received, and that this may pose difficult but fruitful challenges to testing organizations.

The problem of coaching or cramming I suspect will come up in a variety of new contexts, and will need to be faced. In this connection, I think it would be productive to examine the relationships that have developed, as tests have evolved, between a set of learning experiences, on one hand, and a test devised to compare individuals with respect to those experiences. As achievement tests have lost connection with delineated, prescribed, published syllabuses, and have sought to compare fairly individuals whose learning springs from a variety of implicit "syllabuses," they sometimes adopt the strategy of emphasizing whatever is common to all the different syllabuses. The positive result is that the measurement is reasonably fair, but one negative result is that learnings unique to a particular syllabus tend not to be measured, and another result is that the test can be coached for on the basis of the "least common denominator" elements, which the test sets up as a convenient but artificial "syllabus." If pressure builds to prepare course outlines or reading lists linked with college-level tests of this sort, I think it will be difficult to avoid encouraging students to learn what the test happens to test, thereby undermining its measurement value, and perverting its educational role.

Extensive use of college-level tests also may generate new, and I believe in this case, beneficial pressures to employ free response as well as multiple-choice questions, test results that are more informative than standard scores or percentiles tend to be, and tests that match up more sensitively with what those who take them happen to know best.

4) *Access.* A fourth subcommittee is concerned with the *access* of individuals to opportunities for study and its recognition. What populations are in greatest need of new opportunities? How can individuals best be informed about and guided to the opportunities that do exist?

The chairman is Leland Medsker, Director of the Center for Research and Development in Higher Education, Berkeley.

5) *Models.* A fifth subcommittee is concerned with analyzing and making recommendations in regard to models of non-traditional study,

particularly external degree models. If one classifies so-called external degree arrangements according to who provides the instruction and how? who examines the student and how? and who grants the degree? with what authority? one quickly generates well over a hundred theoretical variations on the external degree theme. One can find actual cases of these models. The crucial question is which model fits best the circumstances of a particular student population, particular institution, and a particular state.

Professor Cyril O. Houle, University of Chicago, is the chairman.

6) *Finances.* A final subcommittee will be studying the financial implications of all these models and approaches. This subcommittee will perhaps be particularly useful in comparing the costs of innovative approaches with those of more traditional ways of accomplishing the same ends. It will give attention to the cost implications for institutions, for individuals, and for society.

Howard Bowen, President, Claremont University Center, is the chairman.

To each of these subcommittees there have been assigned staff members of the College Board and ETS. The subcommittees, working with these staff members, are now preparing initial papers, with background and preliminary recommendations. These will constitute the agenda for the July meeting of the Commission, to be held at the University of Michigan.

Fruits. What will be the fruits? The young plant looks healthy and vigorous. Its roots are sound and deep. The soil which surrounds it feels good. This is the early growing season, however. We will only know later on for sure what the Commission has to contribute.

Some points on which the Commission agreed at its first meeting give clues as to the probable nature of the Commission's outcomes:

The Commission will seek ways of maximizing resources both within and without the present system of higher education.

It will give attention to the matters of standards—what they should be, and how they should be applied.

It will work cooperatively with other interested groups and agencies.

Above all, it will be action-oriented.

The Commission takes seriously this action-orientation. It will try to see to it that the steps it decides should be taken are taken. There will undoubtedly be publications, monographs perhaps, and some type of final report, but these are not likely to be the only products.

Commission on Non-traditional Study

Who needs the Commission? Assuming with hope that the Commission will facilitate the emergence of an array of possibilities for post-secondary learning and credit that offers in its numbers and diversity realistic and worthwhile opportunities for all who seek them, I think it is clear that those persons for whom such opportunities are now lacking, and those educators who are struggling to provide such opportunities, will gain from the Commission's work. The assumption is bold, however, and the hope must be joined with imagination, courage, and determined effort by all involved in the Commission's work.

The Impact of Mandated Evaluation on Education

ALEXANDER I. LAW

The decade of accountability, at least as I perceive it, started on April 11, 1965, when the Congress of the United States passed the Elementary and Secondary Education Act, Public Law 89-10. Its major thrust was Title I, known colloquially and commonly as compensatory education or, as we call it, comp ed. Comp ed was the nation's recognition that if every child is to receive an equal educational opportunity to succeed to his potential, the schools must give special attention to the effect that poverty has on the child's learning progress.

Since the enactment of the Elementary and Secondary Education Act, which without doubt is the largest single thrust in education in the history of this country, billions of dollars have been spent and millions of children have been served in one way or another. In recent years the critics of this program have been numerous and many times the criticisms were justified. However, I do not propose to act as an apologist for the success of the program, because I do feel it is successful, but to trace what I feel has been a significant impact on the total education process in this country.

The precipitant of this impact was provided under the federal law itself, and I think that this is very significant. The U. S. Congress, presumably acting for the country as a whole, said this, and I quote:

> Each local educational agency shall, at least annually, provide an evaluation of the effectiveness of its program under Title I of the Act, in meeting the special education needs of the educationally deprived children, including appropriate objective measurements of educational achievement. The measurement of educational achievement under such a program shall include the measuring or estimating of educational deprivation of these children who will participate in the program, and the comparing, at least annually, of the educational achievement of participating children with some objective standard or norm.

That statement is clear.

The Congress also said, "The type of measurement used by a local educational agency shall give particular regard to the requirement that the State educational agency report to the Commissioner on the effectiveness of the programs in that state and proving the educational achievement of educationally deprived children."

For five years California's Division of Compensatory Education has been directly involved in fulfilling that requirement of the law; that is, assisting in the construction each year of an annual state evaluation report based on the evaluation reports of approximately 800 school districts which operate programs that are financed through ESEA, Title I. The strategies used by the districts in fulfilling their obligations, particularly in the earlier years—and here I am talking about 1965, 1966 and 1967—were indeed wondrous to behold. When we published our first reporting forms, our concept was really quite simple; at least it was simple to me. "Where was the student when he started his instructional program? Where was he when he finished his instructional program? And what was the increment of gain which, by inference, could be attributed to that program?"

Most districts took quite literally the section of the public law cited earlier which we sent to them. They entered into the first phase of evaluating these programs. This phase I shall call the "early quest for objectivity."

While almost all districts have as part of their general educational program a process which is euphemistically entitled "District Testing Program," a systematic application of the principles of a sound testing program seem to be lost in many of them. Most district testing programs have been narrow in scope and spotty in their application. To most, objectivity and the reference to some type of normative group immediately meant standardized tests, which in a real sense it does. Even though many common individual achievement tests existed which could be used readily, the search was on for something different, because the programs had to be different.

"Something different" to the districts meant searching out various kinds of tests of the most exotic variety, many of which, I think, never saw the light of print in Buros* and some of which were completely uninterpretable. Indeed, during the first and second years of Title I,

* Buros, Oscar K., Editor, Mental Measurements Yearbook, Highland Park, N. J.: Gryphon Press, 1965.

we counted 119 different instruments that were used in an attempt to assess district programs.

With almost religious fervor districts set out to construct their own instruments—their own rating scales—to assess the nonacademic components. As the state educational agency we fostered this quest for objectivity to a large extent. In perhaps overinterpreting the legislative intent of PL 89-10, we asked districts to submit to us samples of their questionnaires, opinionnaires, rating scales, or other objective assessment devices which they had developed.

We had to discontinue this practice for a very simple reason. We did not have enough space in the house. Some of these devices were rare and wondrous, and some of this wondrousness came from the zealous nature of some of our staff.

One example was the reading program. Now, most people know how to evaluate a reading program, how to give a reading test, and when to initiate a reading testing program; but there are several different ways of teaching reading and there are many different components. In the earlier years, the districts had all this money, and with it they entered stages of wildness which took various forms.

When designing these programs, districts go through predictable phases. The first phase is: "How much money do we get, and how soon do we get it?" The second phase is: "Now that we have the money, what are we going to do with it?" And the third phase, usually occurring about 10 months after the start of the program, is: "Oh, my gosh, if we have to evaluate, what can we do?"

I mentioned before the magnitude of the Title I program—billions of dollars and millions of children—and the impact on the school districts. But let's put these funds in perspective for a moment. The very first assignment I had was to approve the application from the Los Angeles Unified School District. And that was the first time I had ever signed a piece of paper authorizing the allocation of $19,700,000. Los Angeles Unified is the largest school district in California so I feel I can pick on it. Last year it received approximately $23 million in categorical aid funds under Title I. That is a lot of money. But in perspective, it is less than 2 percent of its total operating budget of more than $750 million.

Last year the state of California received approximately $97 million for basic Title I programs. This is far less than one-third of 1 percent of the total school budget of the state in California. Therefore, we are

talking about sums of money which are almost unimaginable; yet, when we compare those funds to the total education budget, kindergarten through grade twelve in California, the Title I funds seem almost puny. The magnitude of Title I funds therefore shrinks and, correspondingly, one would expect the impact of such a program to be less than it actually is.

Title I is a highly visible program. And very early in the history of the program legislators at the state and national levels again asked a very simple question: "Now that you have received your $100 million for the state of California, what gains have these students made, or what changes have you seen in the educational program?" Even before the ink was dry on the Title I bill, the lawmakers demanded to know the impact of the program, not only nationally and at the state level, but in many, many instances at the local level.

And this led to the second phase of evaluating Title I programs which I shall call "the quest for significance." Again, aided and abetted by a zealous staff at the state level, districts—even though they had not answered fully the basic question of how far do the children go—were now intent on proving the statistical significance of their findings. So we got bundles, truckloads of [sic] tests, analyses of variance, analyses of covariance, and other fancy statistical techniques.

It has been proven, I am sure at least several hundred times, that the incremental gain of the post test over the pretest for several hundred students is at or beyond the one percent level of confidence. These gains were duly noted and reported. I knew these statistics had little meaning and the districts, I hope, knew they had little meaning. When you test 500 children, just by living, they are going to have a change in their test scores.

I guess our communications were poor. The legislative bodies asked again, "Tell us, simply—you know, don't give us all this garbage—how much gain did you make?" There is only one statistic that the lawmaking bodies understand, and that is the ubiquitous grade equivalent. Then they asked the question for the third time—it was in a legislative hearing that I first heard the phrase that I have come to abhor: "How much bang did you get for the buck?" We are indebted to Mr. McNamara for that phrase. Most everybody in the whole world associates the F-111 with Mr. McNamara, but I associate "bang for the buck" with him.

To answer these insistent and, frankly, very logical inquiries, we

entered into our next phase of Title I evaluation. This is the "phase of accountability," the shibboleth which you are condemned to hear for the next decade at least.

Now, the accountability concept did not emerge whole born; it went through evolutionary phases. Those evolutionary phases could be characterized by a series of questions: How much does it cost to increase the child's reading achievement by one year? What program components are most effective in promoting achievement in the basic skills? These are followed by the amalgam: Which components are cost effective? And this is how we arrive at the "bang for the buck" component.

I am sure I am taking too parochial an attitude when I attribute the current concept of accountability to categorical aid programs. You will note that these are questions the lay community has been asking for a long time, questions never satisfactorily answered by the educational community. Just look at the failures in the bond issues. Now, I am sure that a very high proportion of these failures can be due to the tax base, but I think above and beyond this it is a failure of communication between the educational community and its constituents.

Five years ago we instituted for a fair proportion of the school population a systematic design for the collection of achievement data. As districts became more sophisticated with their techniques of data collection and analysis, not only were the innovative curricular aspects generalized to the total school program—and we have good documentation of this now—districts also found that there were many general applications of the evaluative techniques which we had coerced them into.

In the past, data from regular school testing programs, now considered necessary for curricular modification, were generally not gathered in a systematic fashion, or the educational community did not communicate results of the program to their constituents. Reports were given to satisfy the boards of trustees that each district as a whole was average. Everybody is happy when things are average. The boards of trustees were told that their districts were average, while in fact 20 to 40 percent of their schools were substandard. But this 20 to 40 percent were buried, you see, because they were all aggregated together and the golden mean emerged. The low-achieving children in these schools had a dubious status—they were poor or black or brown—and thus everyone expected them to be low achievers.

We rejected this construct, and we substituted our own hypothesis: that students of whatever ethnic origin have a distribution of ability which is normally distributed and whose mean probably is not different, given adequate educational and environmental opportunities, than that of the population as a whole.

We have a substantial body of evidence, based primarily on the early years of education, that disadvantaged children can, in fact, achieve at "grade level" on the average and that their achievement scores are symetrically distributed. The critics of compensatory education are many and say that the schools have not provided the impetus nor shown the gains nor lived up to the original expectations of the Elementary and Secondary Education Act. I reject this generalization.

Our advocates also are many, and the evidence is, at least from my rather provincial viewpoint of California, rather preponderant, that, given the kind of program which we have outlined in compensatory education, we can and have moved groups of students to the point where, as one example, the level of achievement of an entire graduating class in a Title I target school was actually superior to the average achievement scores of students in the district as a whole.

Programs that are effective were discovered through the use of systematic evaluation. We have attempted to generalize these programs to other school populations. Sometimes we were successful and sometimes we were not, because obviously one cannot transfer the enthusiasm of the teacher and the motivation of an administrator or support of a parent group from one school or district to another school or district.

The age of accountability is, in the most general sense, I believe, responsible for program effectiveness. Mandated evaluation and the development of a systems analysis approach to education is part of the package of accountability. The development of PPBS is the start of a rational accounting system. PPBS refers to Program Planning and Budgeting System, which is sometimes called PPBES in which E represents evaluation or sometimes called management information systems. The system has a variety of acronyms depending on who is the sponsoring agent, such as ASBO, the state of Colorado, or the state of Oregon, but they all mean about the same thing. And here I mean that it is a system of accounting in the broader sense of the word.

As for the development of behavioral objectives, we have been inquiring about it for several years in Title I, and education is really rediscovering the wheel. We tend to do that about every other decade. We have to rediscover something that was discovered perhaps 20 years before.

I was first exposed to performance objectives or behavioral objectives, whatever you wish to call them, during my undergraduate work in psychology in 1950. I feel it is appropriate here to get in my jousts at the windmill of criterion-referenced tests, which are a corollary to performance objectives. I don't believe so-called criterion-referenced tests are indeed different from norm-referenced tests. Yes, it is easy to make a semantic distinction between them, and yet on application of these instruments, one finds in the last instance, there is inevitably a normative type of interpretation. And whatever the process used is, the interpretation is the final message. Be it norm or criterion reference, the message comes out that performance is better than or worse than, greater than or less than, or different from some other population or sample. We find that the northeastern quadrant is better than the southeastern quadrant. And all these, I submit, are normative statements. So I really see a false distinction between these types of tests. Both are useful and both deserve a separate label. But I think we should be very cautious in our interpretation of them.

I am sure that accountability concepts would have appeared on the educational scene without the impact of categorical aid funds. But it is my belief that ESEA, Title I, hastened the arrival of accountability concepts by mandating systematic evaluations, encouraging experimentation in curriculum, involving parents and community members in decision making based on information derived from programs, making an annual educational audit (Title I did it, Lessinger named it) and asking districts to set up measurable objectives.

Several years ago Marvin Alkin, in addressing this conference, issued a caveat regarding "behavioral objectives." I have a few caveats about evaluation. Mindful of the educational pendulum, I am a little afraid of the amplitude of the arc of accountability and all that has been detailed. I sense a glut of ill-written objectives, with equally bad items purporting to measure the outcomes of these objectives. Good objectives can be written, comprehensive and realistic evaluations can be made, and effective communications can be established. I have seen all of this accomplished.

A Workable Solution to the Demand for Accountability: the Georgia Assessment Project

WILLIAM H. SCHABACKER

Just over a hundred years ago Georgia was virtually destroyed by the devastations of the Civil War. However, Georgia managed to rebuild, like the phoenix who rises again in youthful freshness after being consumed in fire.

As did the phoenix of classical antiquity, Georgia returned to its nest to be consumed by the flames of the dual school system. From the pyre of the disestablished dual educational system a young phoenix is being born and the opportunity for educational reform has emerged with youthful freshness and vigor.

I am here to tell you about a low profile operation in the Georgia Department of Education—the Division of Planning, Research and Evaluation—and one of its projects that is capitalizing on the vigor and freshness of this new education opportunity. This project is the Georgia Assessment Project—GAP.

GAP is a project designed to measure the quality of education on a statewide basis. Results will be used for:

(1) measuring the impact of educational programs, services and resources on children and youth
(2) determining the relationship between costs and educational benefits
(3) identifying areas of critical educational need, and
(4) developing long-range educational planning.

GAP is just a part, albeit a very important part, of the Division's over-all efforts. The flow chart (Figure 1) broadly outlines the Georgia Department of Education's plan to deliver the state-level resources for elementary and secondary education based on identified student needs. I will be talking about the process we went through in goal-setting as reflected in Panels 1 through 5, and the preparations now underway for measuring pupils' progress toward the goals as reflected in Panels 6 through 8.

The Georgia Assessment Project is based on a series of assump-

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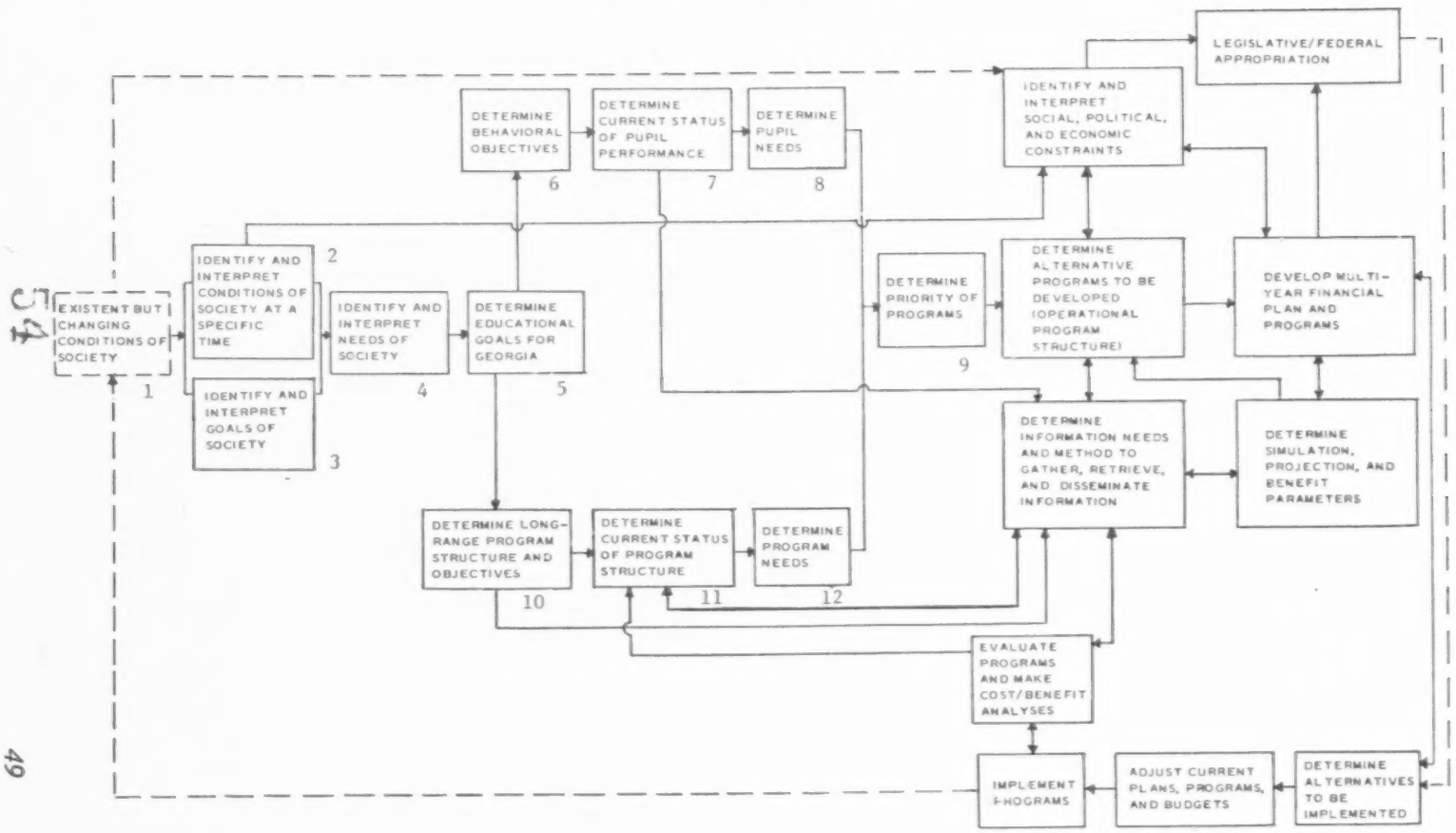
Figure 1

PLANNING CYCLE
Georgia Department of Education, Division of Planning, Research and Evaluation


EXISTENT BUT CHANGING CONDITIONS OF SOCIETY
1
IDENTIFY AND INTERPRET CONDITIONS OF SOCIETY AT A SPECIFIC TIME
2
IDENTIFY AND INTERPRET GOALS OF SOCIETY
3
IDENTIFY AND INTERPRET NEEDS OF SOCIETY
4
DETERMINE EDUCATIONAL GOALS FOR GEORGIA
5
DETERMINE BEHAVIORAL OBJECTIVES
6
DETERMINE CURRENT STATUS OF PUPIL PERFORMANCE
7
DETERMINE PUPIL NEEDS
8
LEGISLATIVE/FEDERAL APPROPRIATION
IDENTIFY AND INTERPRET SOCIAL, POLITICAL, AND ECONOMIC CONSTRAINTS
DETERMINE PRIORITY OF PROGRAMS
9
DETERMINE ALTERNATIVE PROGRAMS TO BE DEVELOPED (OPERATIONAL PROGRAM STRUCTURE)
DEVELOP MULTI-YEAR FINANCIAL PLAN AND PROGRAMS
DETERMINE INFORMATION NEEDS AND METHOD TO GATHER, RETRIEVE, AND DISSEMINATE INFORMATION
DETERMINE SIMULATION, PROJECTION, AND BENEFIT PARAMETERS
DETERMINE LONG-RANGE PROGRAM STRUCTURE AND OBJECTIVES
10
DETERMINE CURRENT STATUS OF PROGRAM STRUCTURE
11
DETERMINE PROGRAM NEEDS
12
EVALUATE PROGRAMS AND MAKE COST/BENEFIT ANALYSES
IMPLEMENT PROGRAMS
ADJUST CURRENT PLANS, PROGRAMS, AND BUDGETS
DETERMINE ALTERNATIVES TO BE IMPLEMENTED

tions. I would like to share with you some of these assumptions and the rationale for each.

Our society is increasingly characterized by change. Many changes will have important implications for us and will necessitate changes in education. GAP recognizes that there is an urgent need to anticipate the changes that are likely to occur in society during the next 15 years, to understand their implications for education and to plan the necessary adjustments to meet emerging needs. Some of the prospective changes may be beneficial to society; others may be harmful. Man, to some extent, can control the nature and direction of change. With increased knowledge and understanding he should be in a better position to plan and prepare for those changes that are beneficial and to avoid those that could be disadvantageous or even disastrous. We also are preparing students to live in the society of the future. If we know what the society might be like and what it ought to be like, our education programs can provide a positive force in seeking and effecting meaningful and desirable social, political and economic change.

Goal Directed [1]

The education effort can be evaluated maturely and defensibly only in light of the ends it seeks to secure. Goal statements abound in education. From the Committee of Ten in 1894, through the Seven Cardinal Principles of 1918, to the statements of the Education Policies Commission in recent times, educators and others have formulated goals. Such statements are usually good; they are fundamentally in harmony—indeed, often quite similar; and yet they do not seem to satisfy because they are so broad, so general.

Fundamental to GAP, then, is the thesis that an initial step in providing a measurement of education is to set goals for education that identify the qualities and characteristics which citizens should possess if they are to live self-actualizing lives in the future.

State Board to Set Goals [2]

The State Board of Education in Georgia is vested with vast power, authority and responsibility with respect to the education enterprise. More than sixty-five percent of all funds for public elementary and secondary education are managed by the State Board of Education. The Board is placed in a position where every citizen in the State

can observe its actions. Because of this elevated position, it is able to view the State and its citizenry, from the largest city to the smallest hamlet and it is therefore concerned with the quality of education available and the educational accomplishment of every man and woman, every boy and girl. Furthermore, it is composed of lay citizens from all geographic areas of the State. The very existence of the Board reflects the time-worn principle of public education that, after all is said and done, the schools still belong to the people.

GAP recognizes that because of the Board's vast authority and management responsibility, statewide perspective, geographic representation and lay composition, it is appropriate and, yes, even mandatory not only for the Board to generate its own goals for education, but also to provide for the statewide measurement of education programs which seek to implement and achieve these goals.

Education and the Larger Society

A central concept in American public education is that it derives its purpose, form and content from the particular social environment in which it exists. Education is a product of the culture of which it is a part. Consideration must be given to such matters as the worth and dignity accorded the individual, religious ideals, the sources of political power, the class structure, the nature and operation of the economy and the thought patterns of the age, because all are woven at any given time and place into the purpose and form of the education enterprise.

GAP, recognizing that education is only a part of the larger society and that the schools belong to the people, concluded, that in order to provide assistance to policymakers in setting goals for education it was appropriate to turn to outstanding citizens who might be in a better position to view society and culture in its entirety.

Focus on the Products of the Education Process

Past and present accountability and assessment efforts far too often focus on the inputs or processes of the education endeavor rather than the product of education—the child, youth or adult. If learning is defined as change in behavior and if we are to make an adequate assessment of the education enterprise, we must then look at the child. Processes and inputs become important only when related to behavioral changes in students.

GAP is committed to assessing the progress of education by looking at the productivity of the schools.

Expansion of Goals into Performance Objectives

Few well-informed educators have not heard of behavioral objectives. The force behind this resurrected term seems to be the recognized need to express desired learning outcomes as specifically as possible so that progress toward achieving these outcomes may be easily measured.

GAP recognizes that the goals for education should be stated in such specific terms and in such concrete language that the goals the students achieve are readily apparent to anyone observing students' behavior. Therefore, each goal will be expanded into performance objectives expressed in measurable terms.

Construction of Criterion-Referenced Measurement Exercises

In the past, when student outcomes have been measured, we have relied almost exclusively on standardized tests. Standardized tests have been used primarily because they are cheap, quick and readily available. However, standardized tests are normative in nature, designed to ascertain an individual's performance in relation to the performance of other individuals measured by the same device. They do not provide an adequate measurement of student performance in terms of the extent to which he has mastered a given set of objectives without reference to the performance of any other student.[8] Criterion-referenced measures, on the other hand, are used to ascertain an individual's status with respect to some criterion. They make no comparisons among individuals.

GAP will focus on the preparation of criterion-referenced measurements so that the performance of students may be related to behavioral objectives, which in turn are a more specific expression of student performance toward acquiring those qualities and characteristics sought in the goals of the State Board of Education.

Sampling Procedures

Perhaps the most useful and versatile tool available to researchers is sampling. Modern sampling techniques using only five percent of the

study population make possible many studies such as GAP that could not be done on a total universe basis. Moreover, sampling often makes data available more quickly, more economically and sometimes more accurately than do universe studies.

Tentatively, GAP will focus initially on three age levels: 9, 13 and 17. These ages seem to be the most plausible, for at 9 children have been exposed to the basic programs of primary education; at 13 most have concluded elementary school education; and at 17 youth are close to completing their secondary school education. Only a small percentage of children at each age level will need to be involved in GAP.

In addition, to determine the educational progress of children at various age levels, GAP thought it important for education decision makers to have information about certain student sub-populations. The tentative dimensions for sub-population stratification are sex, race, regions of the State, type of community the child lives in and socioeconomic background.

It appears that the number of measurement exercises for each goal may be extensive. Therefore, exercises as well as student samples are to be selected concurrently, using a multi-matrix sampling procedure. The age levels and some of the sub-population strata, as you may recognize, are not too dissimilar to those of the National Assessment of Educational Progress. We hope to use some of the NAEP exercises in GAP. This will give us regional as well as national comparability of student performance.

Reporting Results

Since the lay public and its representatives, the members of the Legislature, are demanding to know more about educational progress, these are the groups to which the results must be communicated in as easily an understandable manner as possible. In addition, more detailed reports will be prepared for distribution to professional educators, so that these decision makers too may have better information to guide decisions.

The important point is that everything with respect to student performance will be above board. Information about shortcomings as well as accomplishments will be made available to all. In this way we hope to avoid any criticism of data withholding or manipulation of results.

Identification of Critical Educational Needs

The results of GAP, as they become available, should provide a quantitative assessment of student performance as related to the Goals for Education in a wide range of areas where the State education enterprise has done weil and where it has not done well. The delivery of State funds and State Department of Education services can then be directed to meet the identified areas of critical educational need to where the discrepancy between actual performance and desired performance has been identified.

Use in Local School Systems

It is anticipated that, as the GAP model is completed and tested and the initial assessment is made, the expertise gained by the GAP staff on a statewide basis may be used to provide technical assistance and services to local school systems so they too may conduct their own assessment. Several school systems already have used either a modification of the GAP process for goal setting or the GAP goals themselves for their own planning, assessment and accountability efforts.

Instruments Used for Other Purposes

The instruments developed in GAP will have other applications. One of these will be to conduct studies to help determine what effect inputs into the education enterprise have on student performance. As greater sophistication in simulation techniques is gained, cost-effective analyses can be used to simulate education decisions so that we need not wait for years and years to find out what results might be expected when certain policies are adopted.

The Phases of GAP

I would like to share with you briefly each phase and major activity of GAP.

Phase I—Setting Goals

In 1969 the State Board created an Advisory Commission on Education Goals made up of eleven distinguished citizens of the State. The tasks of the Commission were to:

1. Examine the social, economic and political life of Georgia

2. Project the probable social, political and economic conditions of the State through 1985
3. Identify as "goals for education," the knowledge, skills and values that will enable the citizen of Georgia to successfully live in and shape the future, and
4. Suggest the nature of the education system necessary to achieve the desired goals.

Recognizing fully that the Commission was not endowed with the ability to gaze into a crystal ball, highly qualified specialists prepared twenty position papers about Georgia's current status and its probable status in 1985 with respect to the social, economic, technological, political and cultural environment. Some of the areas examined were Economy, Manpower and Employment, Social Disorganization, Religion, the Structure of Government, Ecology and the Arts.

In addition, 27 critiques were prepared by other specialists to provide additional analyses, corrections and amplifications. The papers and their critiques have been published in a book, *Focus on the Future of Georgia, 1970–1985,* Edited by William H. Schabacker, Russell S. Clark, and Homer C. Cooper.[4] In addition to the book, a film, "The State of the Future," has also been prepared. It has been shown on the Georgia Education Television Network and has been used by numerous non-education and education audiences.

Conditions and consequences of the emerging society of Georgia were phrased from the papers and critiques in the form of propositions by the GAP staff to help the Goals Commission better understand what the future might be like.

The Commission was asked six questions about each proposition:

1. What is good about this condition and what is bad?
2. What can be done to perpetuate the good?
3. What can be done to rectify the bad?
4. Is it desirable and necessary for the education enterprise under direction of the State Board of Education, to seek and provide educational experiences that would develop these qualities in each individual?
5. What qualities should the citizen possess that would promote the well-being of everyone and assure individual worth and dignity?
6. Finally, what qualities should the citizen possess that would enable him not only to live successfully in the environment of

1985 and beyond but also to shape that society?

As answers to these questions were formed, the Goals Commission prepared the recommended "Product Goals" that described the qualities and characteristics each individual should possess that, upon leaving the secondary school would help him become a person prepared for many options. The Product Goals are classified under the seven headings:

1. The Individual and Himself
2. The Individual and Others
3. The Individual and the Governing Process
4. The Individual and Social and Economic Institutions
5. The Individual and His Physical Environment
6. The Individual at Work
7. The Individual at Leisure

Then the Goals Commission suggested the means—the inputs and processes—that would help in achieving the Product Goals. The means, called "Enterprise Goals" by the Commission, are classified under six headings: People to be Served, The Curriculum, The Staff, Organization and Administration, Buildings and Facilities, and Finance. Since the GAP effort is concerned only with measuring pupil performance with respect to the Product Goals, the Enterprise Goals have no immediate value to GAP. However, in the flow chart (Figure 1) the Activities labeled 10, 11 and 12 relate to the preparation and assessment of a long-range program structure and program objectives. The project within the Division of Planning, Research and Evaluation concerned with these activities has immediate use for the Enterprise Goals.

The goals were then submitted to the State Board. After reviewing the report the Board adopted the Commission's recommendations. The full text of the report as well as the Product Enterprise Goals have been published in a booklet, *Goals for Education in Georgia.*[5]

Phase II—Development of Objectives and Measurement Exercises

As the first step in Phase II, a group of knowledgeable people familiar with various aspects of Georgia life will be identified. Each person will be asked to take each product goal that might relate to his area of expertise and prepare a list of descriptions of observable behavior for a person about to graduate from high school that would show his acquisition of the qualities and characteristics called for in

that goal. From these lists the GAP staff will write performance objectives expressed in measurable terms for each of the product goals.

The objectives will then be submitted to panels of lay persons. Based on its plausibility as a valid performance expectation related to the qualities and characteristics sought in the product goals, the panels will be asked to accept, reject or revise each performance objective.

The approved performance goals will then be submitted to a group of teachers and curriculum specialists. These professional educators will be asked to determine at which age level stratum of the pupil population the students should be able to accomplish each particular performance objective. If the expected performance is for the age 17 or 13 level, these specialists will then be asked to determine the behavior expected at the age 9 level that would show progress toward accomplishment of the performance objectives appropriate for the 17-year-old.

The output of the professional educators will then be submitted to other panels of lay persons. For each age level these panels also will be asked to accept, reject or revise each performance objective based on its plausibility as a valid performance expectation, i.e., whether it shows progress or achievement of the qualities and characteristics sought in the product goals.

Criterion-referenced exercises that will provide the method of measuring progress toward what is sought in each goal will be constructed by the GAP staff with the advice of measurement specialists. Delivery systems for the exercises will then be prepared. At this point we are leaving all options open with respect to delivery systems. Such technological resources as the statewide educational television network, video tape, recorders, films, film strips, tape recorders, as well as traditional paper and pencil tests, all hold some promise as potential delivery systems for the measurement exercises. The exercises and delivery systems will then be field-tested. It is anticipated that this phase, Phase II, will take two years.

Phases III and IV

Phase III will be carrying out the initial assessment using the sampling procedures previously described. The exercises will be administered to the sample using the delivery systems developed in Phase II.

Phase IV will determine the areas of critical educational need. As

the measurement results are collected and analyses made, areas of critical educational need may then be identified. The needs will be defined as the gap between what minimal qualities and characteristics the society of Georgia seeks in all students—the product goals for education—and how well students perform on measurement exercises designed to determine progress toward these goals—the actual performance level as determined by the assessment.

In Conclusion

GAP as a project will be concluded when the reporting phase has been completed. If it is determined that assessment should become an ongoing program of the State Department of Education, the recycling process will begin as measurements are taken from time to time and pupil progress is reassessed. The GAP-developed instruments will be available to conduct cost-effectiveness studies that can relate input to results. Resources can then be mobilized to provide whatever is necessary to narrow the gap between actual student performance and what society seeks from the education enterprise. Other studies using the GAP-developed instruments can be used to determine what effect life outside the school may be having on student performance.

It is possible that we will then be one step closer to getting some answers to the often asked question, "When you take X dollars and multiply it by X children with this kind of need, what kind of result can you expect?" Hopefully we can determine what educational programs are having a good effect on children, what are having a bad effect and what are having no effect at all.

Using the results of GAP—the data on student performance, criterion-referenced instruments and field-tested delivery systems—the Georgia Department of Education expects to be able to capitalize on the opportunity for education reform. Using strategies designed to assure results we expect to be in a position to mobilize the total resources of the statewide education effort toward areas of critical educational need. The State Board of Education will then be in a position to be fully accountable for its decisions regarding the total public elementary and secondary education enterprise in Georgia.

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Conference List

MARY K. ABBOTT, Archdiocese of San Francisco, San Francisco, California
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ELI OBRADOVICH, California State Department of Education, Sacramento, California
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ALAN SEDER, Educational Testing Service, Berkeley, California
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CARLETON B. SHAY, California State College at Los Angeles, Los Angeles, California
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RALPH P. SHERLOCK, Merced Union High School District, Merced, California
E. O. SHINN, College of San Mateo, San Mateo, California
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MERIBAU W. SWANK (MRS.), Palo Alto Unified School District, Palo Alto, California
RAY L. SWEIGERT, JR., California State Department of Education, Sacramento, California
SISTER ALICE TOBRINER, College of the Holy Names, Oakland, California
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PHYLLIS VAN VLEET, Salinas Union High School District, Salinas, California
CLYDE VOORHEES, Fremont Unified School District, Fremont, California
JIM WAKEMAN, Harcourt, Brace, Jovanovich Testing Division, San Francisco, California
HARVEY R. WALL, Mt. Diablo Unified School District, Concord, California
GAYLEN R. WALLACE, University of Tulsa, Tulsa, Oklahoma
JONATHON WARREN, Educational Testing Service, Berkeley, California
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JOHN WENNERGREN, Gonzales School District, Gonzales, California

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PATRICIA WHEELER, Educational Testing Service, Berkeley, California
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KENNETH A. WOOD, California Community Colleges, Sacramento, California
THOMAS WOODNUTT, Golden Gate College, San Francisco, California
DALE WOOLLEY, University of California, Los Angeles, California
RALPH WUEBKER, Ukiah High School, Ukiah, California